

Preventive Interventions with Foster Care Youth

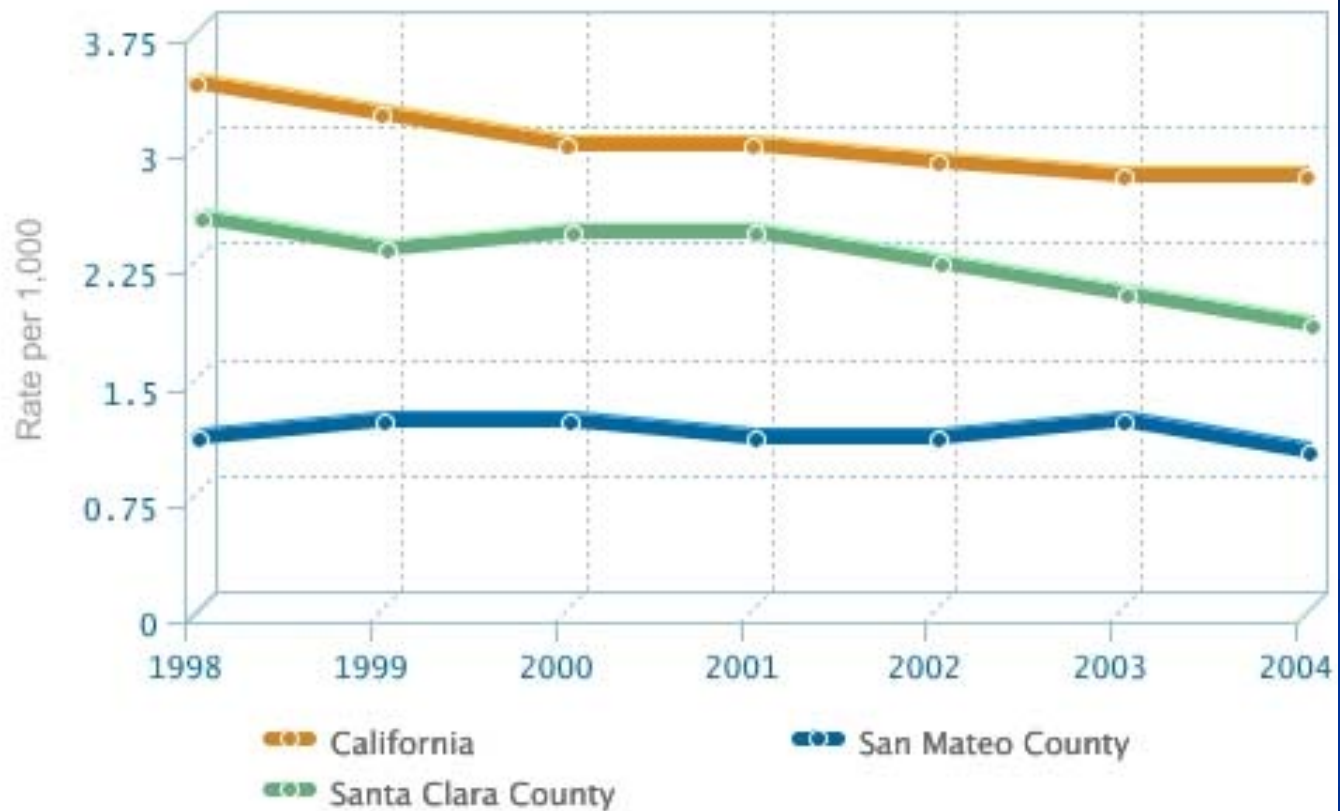
Leslie D. Leve, Ph.D.

Oregon Social Learning Center &
Center for Research to Practice, Eugene, OR

Prevention & Early Intervention In-Service Training,
Mental Health Services Oversight and Accountability
Commission, Burlingame, CA

August 4, 2006

First Entries into Foster Care: 1998 - 2004

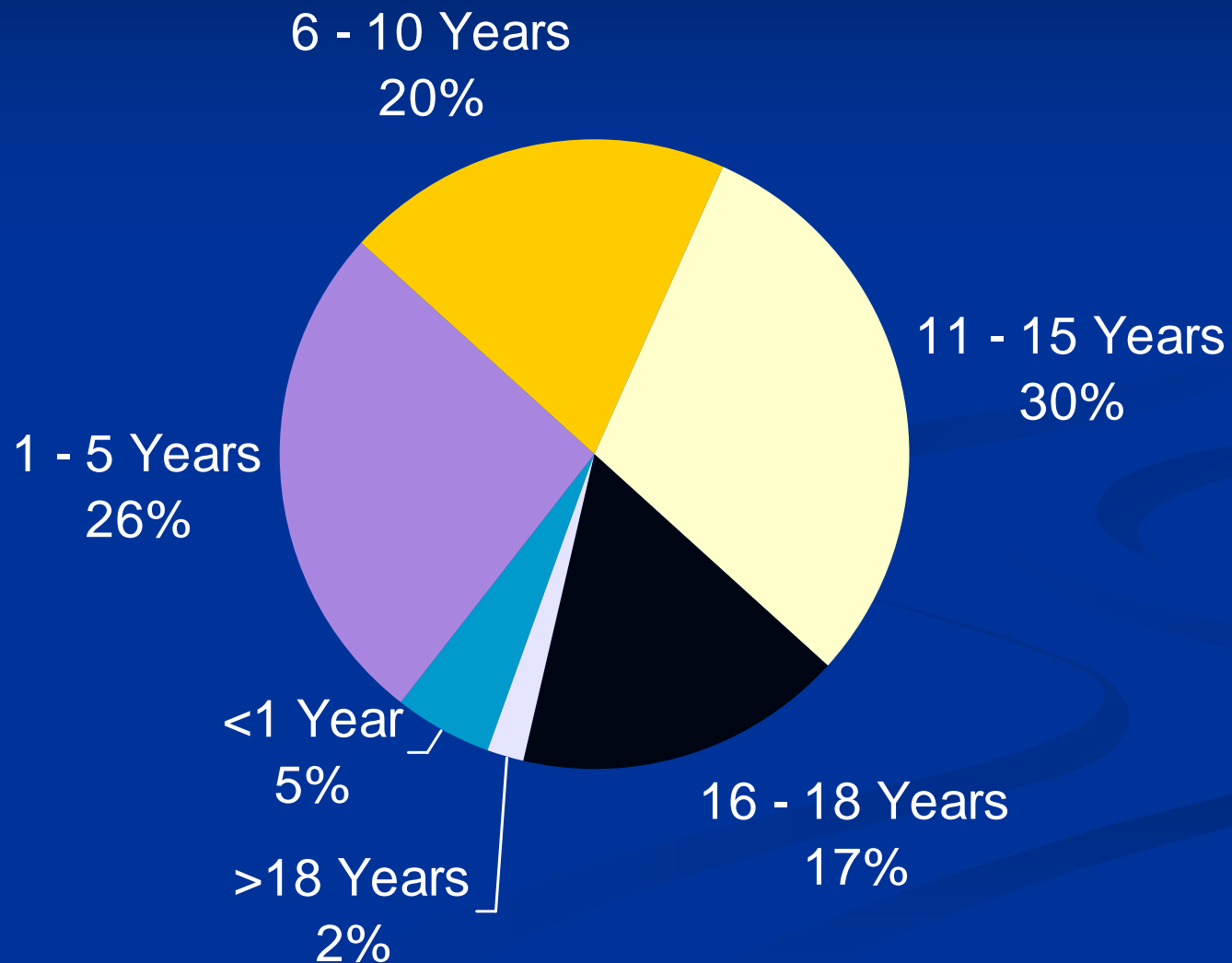


Source: Needell, B., et al. (2005). Child Welfare Services Reports for California. Retrieved August 1, 2005, from University of California at Berkeley Center for Social Services Research, © kidsdata.org, a program of the Lucile Packard Foundation for Children's Health

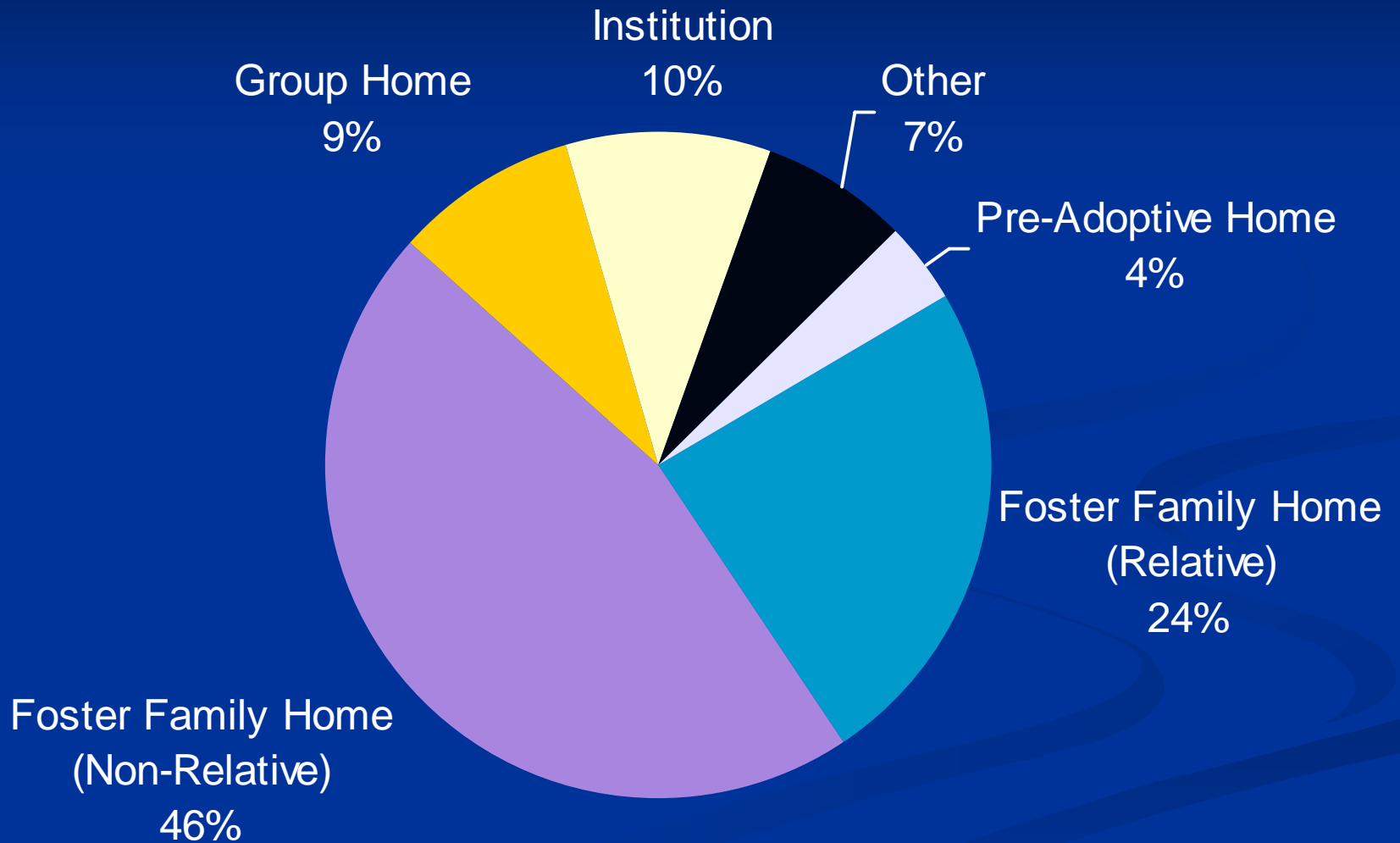
Clear National Focus on 3 Priorities for Children in Foster Care as a Result of Federal Audits of States

- Child safety
- Placement permanence
- Child well-being

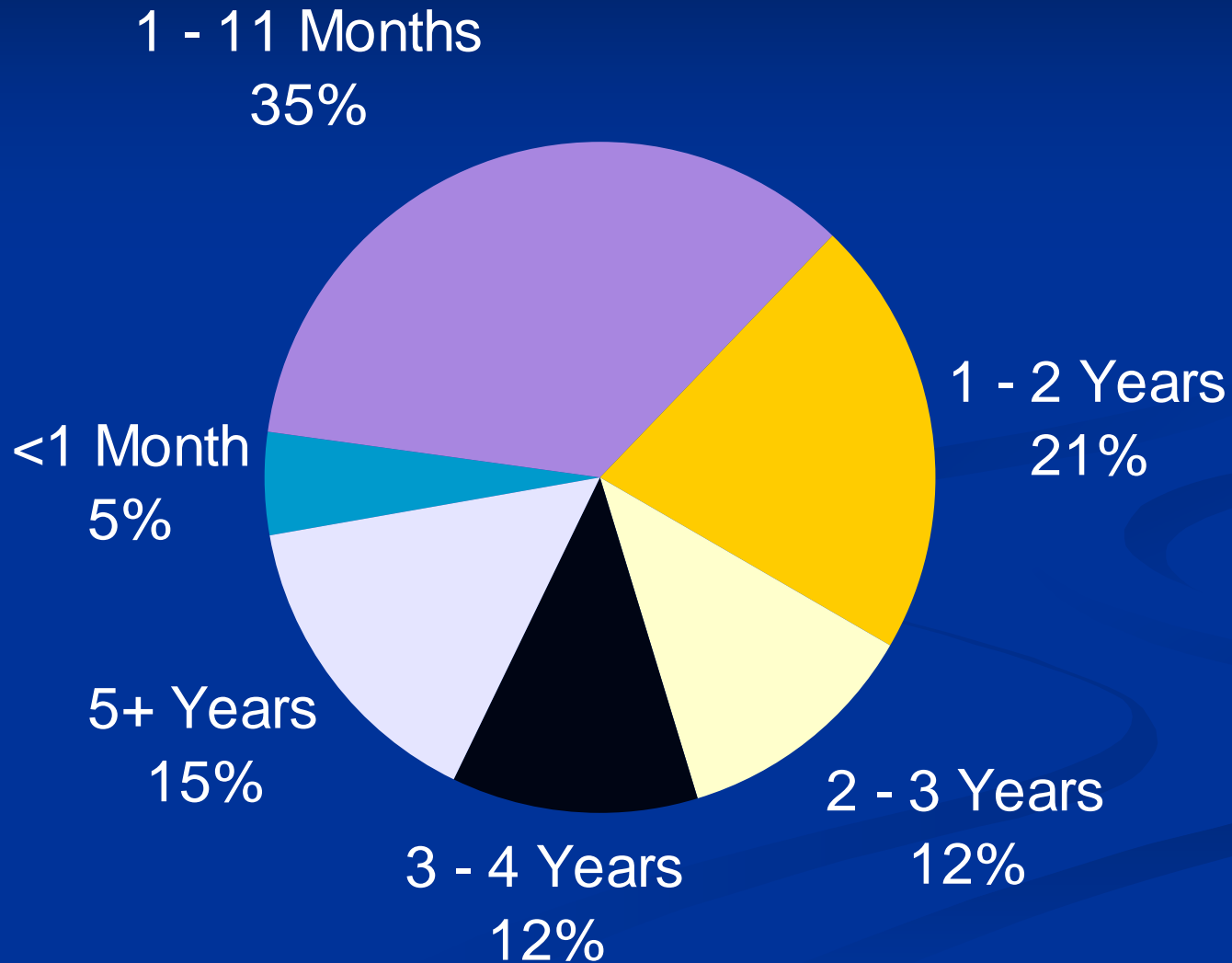
Age of Children in U.S. Foster Care in 2004 (AFCARS Report)



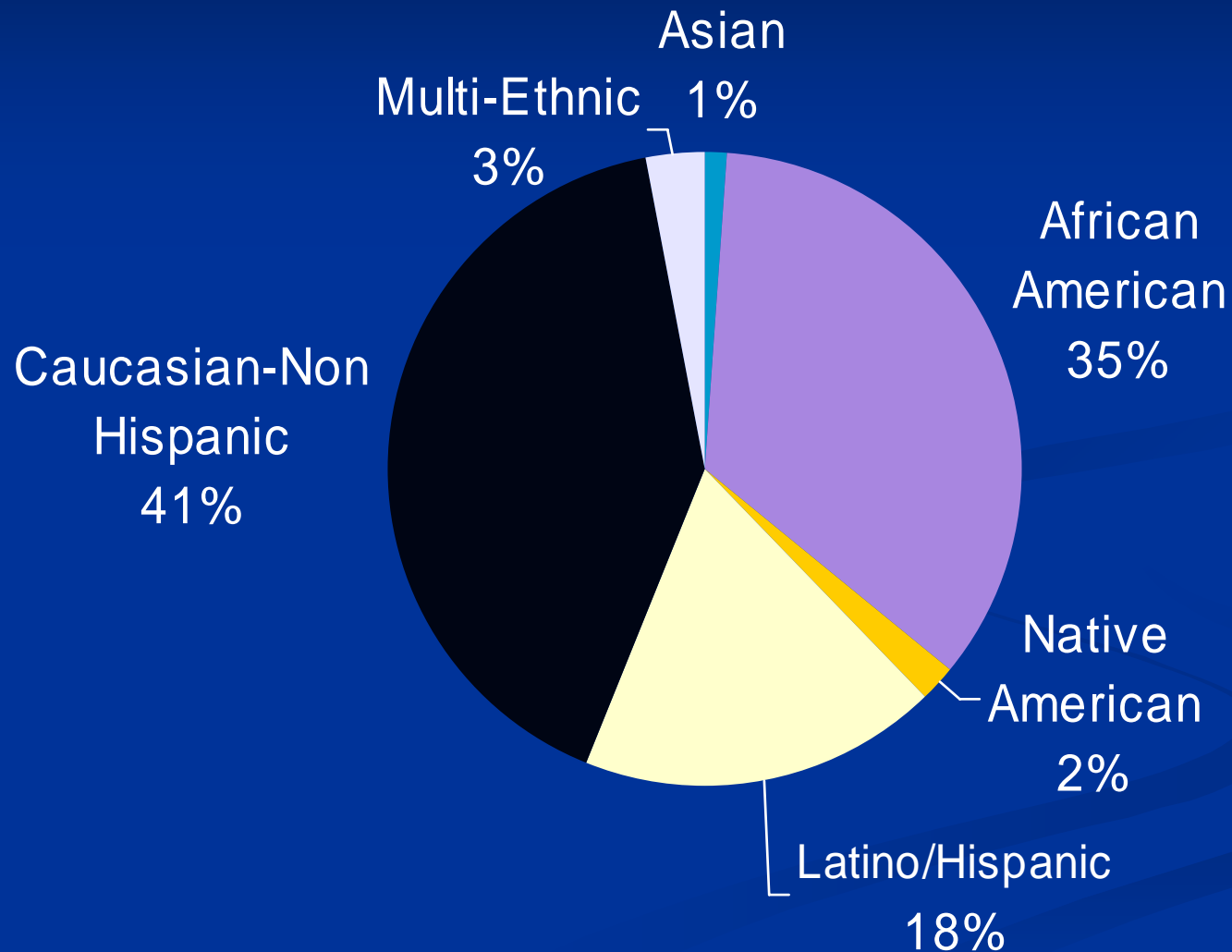
Placement Setting



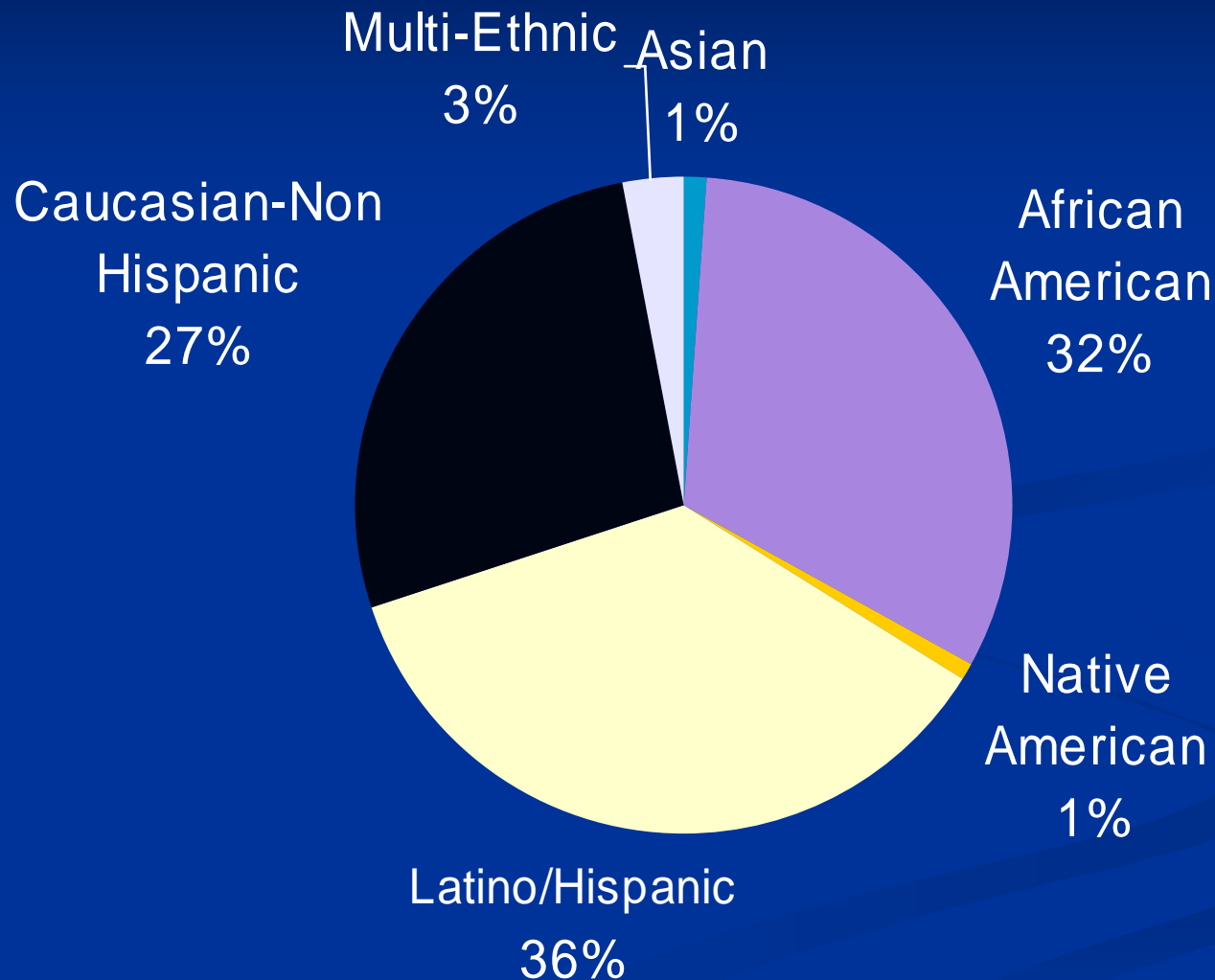
Length of Stay in Foster Care



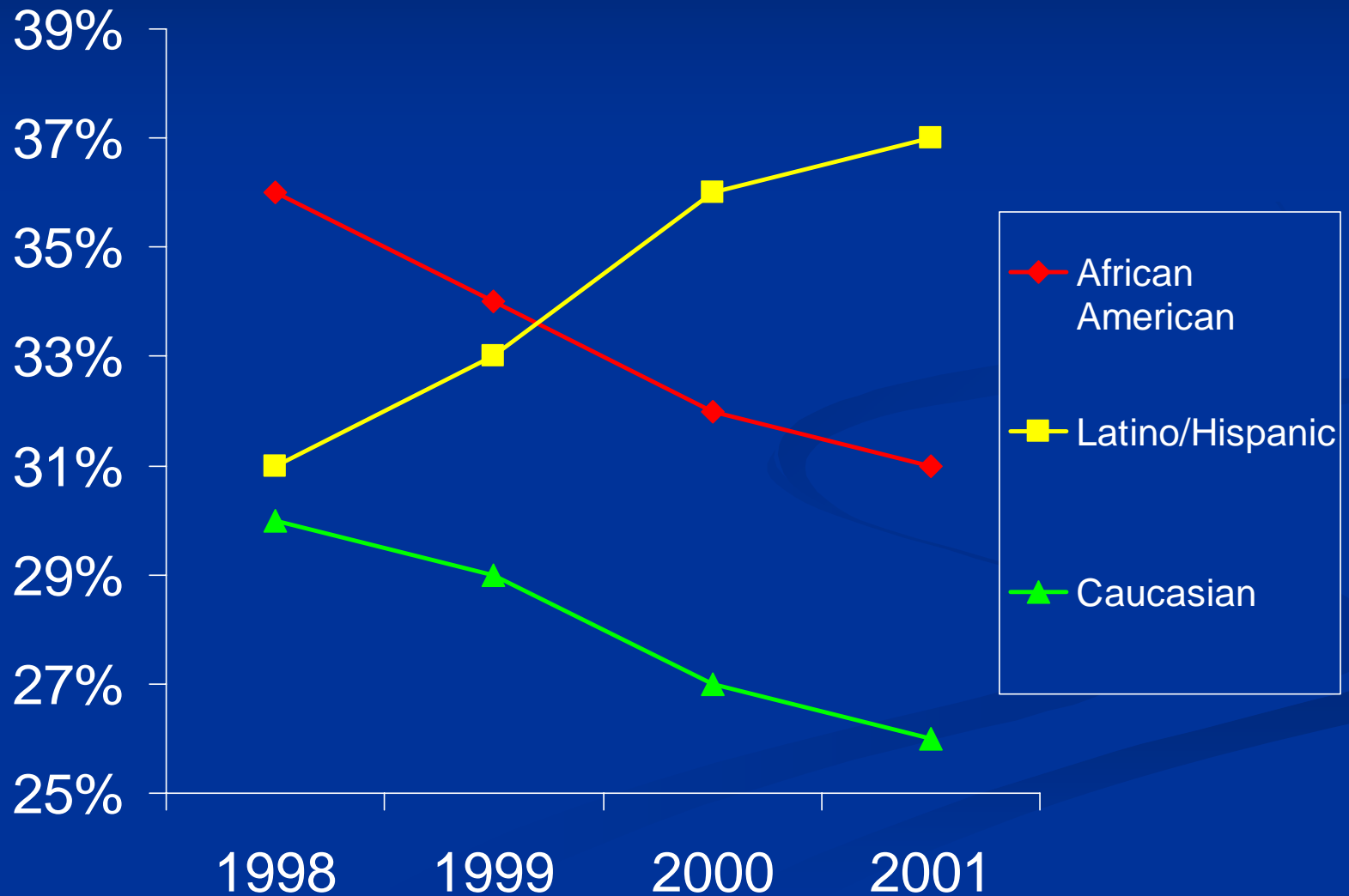
Child Race/Ethnicity in US Foster Care Population



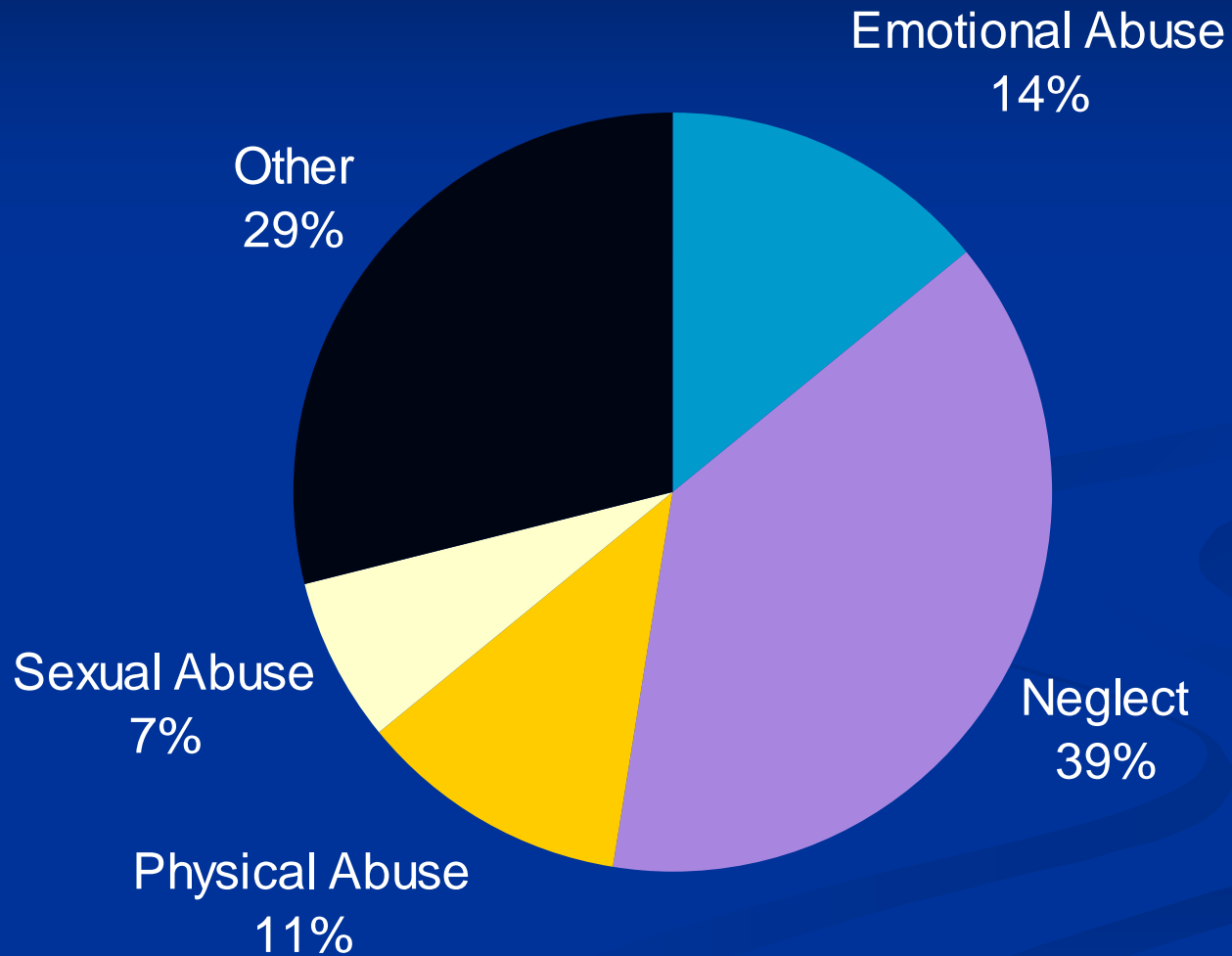
Child Race/Ethnicity in CA Foster Care Population



Developmental Trends in Foster Care Population in CA



Maltreatment Type (CA)



5 Reasons for Early Intervention in Foster Care Youth

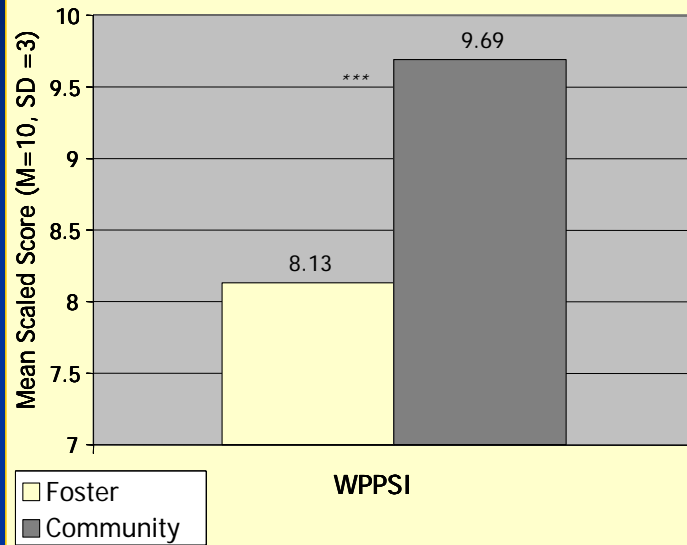
- Prevalence of psychosocial/developmental problems in young foster children
- Rate of placement failures
- Stability of high-risk trajectories into adolescence
- Negative effects of early stress on the brain
- Potential brain plasticity in response to intervention

Prevalence of Problems

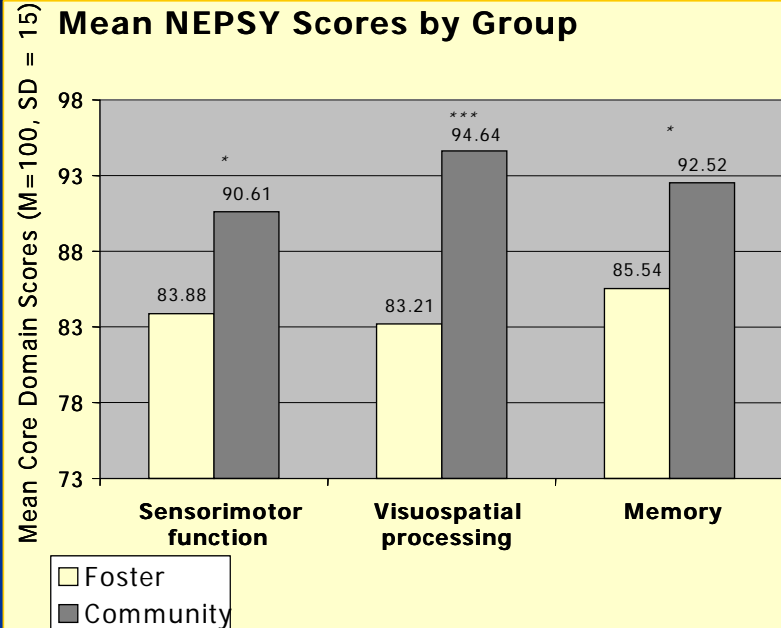
- Over 500,000 children in foster care in the U.S.
- In the U.S., through the 1990's, the number of foster children under age five increased at twice the rate nationally of the general foster care population (Goerge & Wulczyn, 1998 ; U.S. GAO, 1994).
- Currently, children under 6 represent one third of the U.S. foster care population
- Klee et al. (1997): Over 80% of children in this age group have developmental or emotional problems; over 50% exhibited problems in both areas.

Developmental Problems

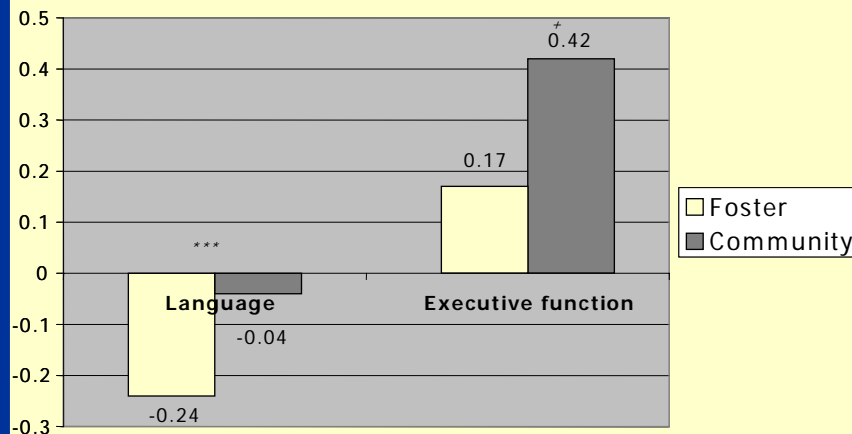
Mean WPPSI Scores by Group



Mean NEPSY Scores by Group

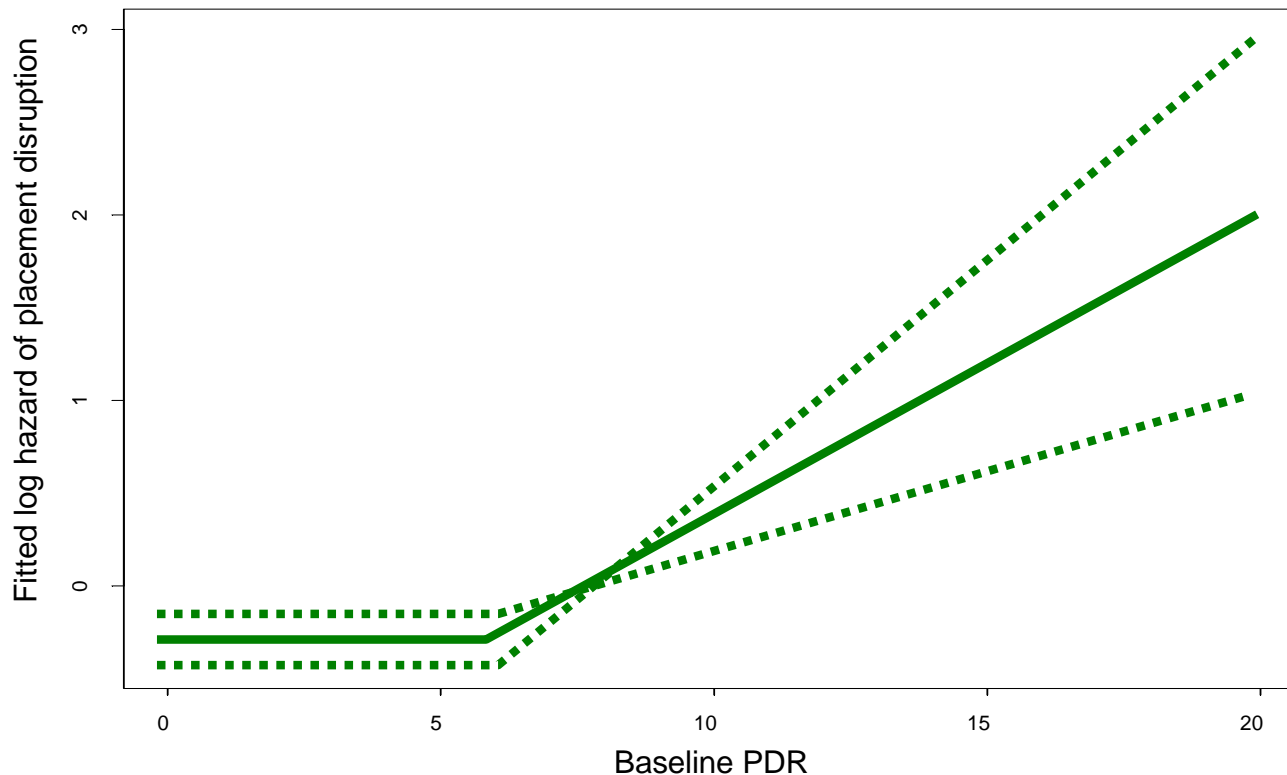


Mean Summary Scores for Language and Executive Function by Group



Placement Failures

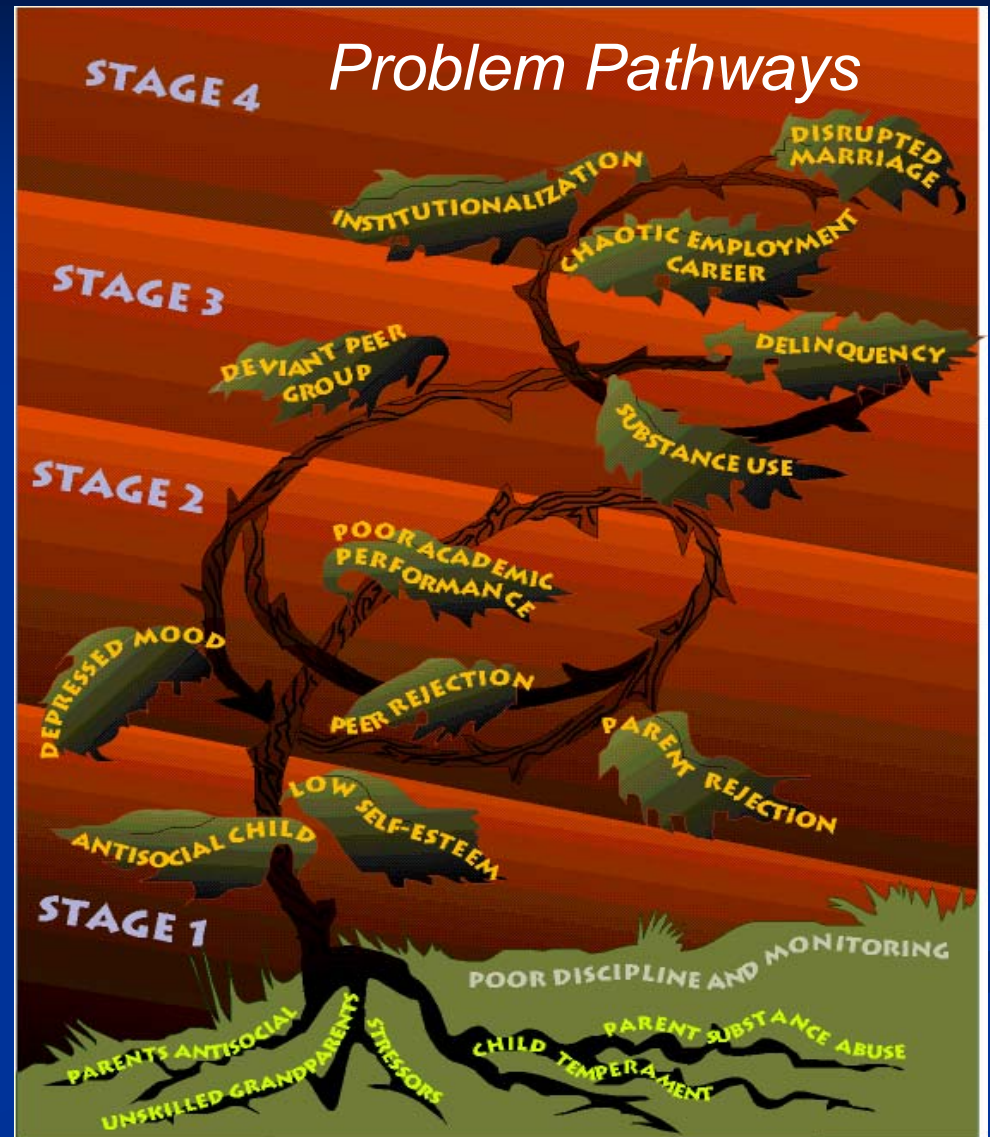
5 problem behaviors per day predicts placement disruption within the next 6 months. After 5 behaviors, every additional behavior increases the probability of disruption by 13% (Chamberlain et al., 2006)



Dashed lines indicate 95% pointwise confidence intervals.

Stability of Problems

- Up to 50% of foster children have symptoms of psychological disorders (e.g., Glisson, 1994, 1996; Horowitz, Simms, & Farrington, 1994; Stein, Evans, Mazumdar, & Rae-Grant, 1996; Trupin, Tarico, Benson, Jemelka, & McClellan, 1993).
- Nearly nine times the relative risk of psychopathology, and specific syndromes are between 2 and 32 times more likely (McIntyre & Keesler, 1986).



Stability of Problems Leading to Juvenile Justice Involvement for Girls

- 17 transitions in parent figures (6 before age 13)
- 2.8 prior out-of-home placements
- 74% had at least one parent convicted of a crime
- 93% have a history of documented physical or sexual abuse
- 79% have witnessed domestic violence

(Leve & Chamberlain, 2004)

Early Predictors of Age of First Arrest

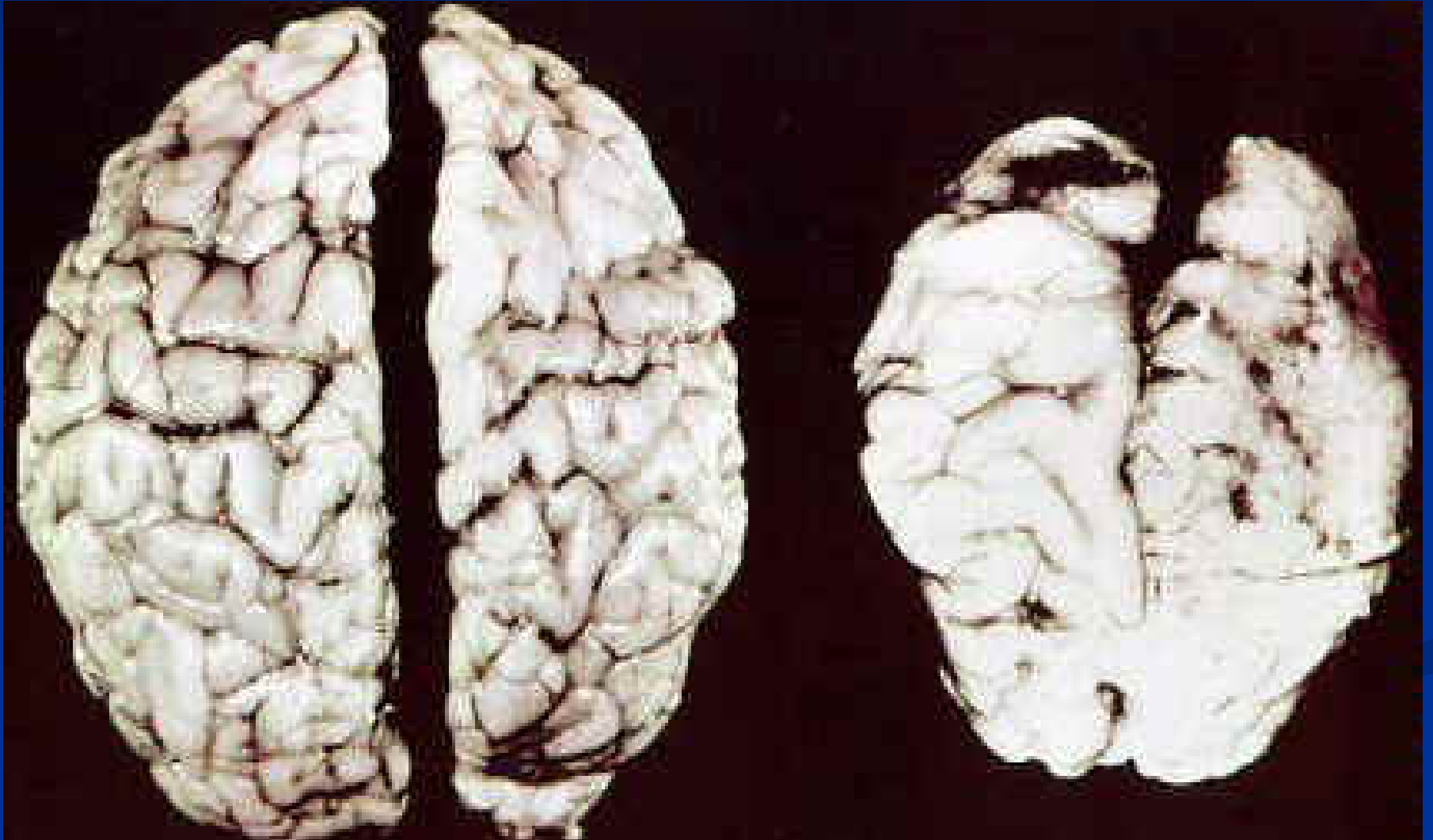
| | <i>b</i> |
|-------------------------------|----------|
| Girl age | .17 |
| Menstrual onset | .11 |
| IQ | .21+ |
| ADHD | .00 |
| Severe punishment | .00 |
| Sexual abuse | -.05 |
| Parental transitions | -.42** |
| Biological parent criminality | -.28* |

$R^2 = .52^{***}$

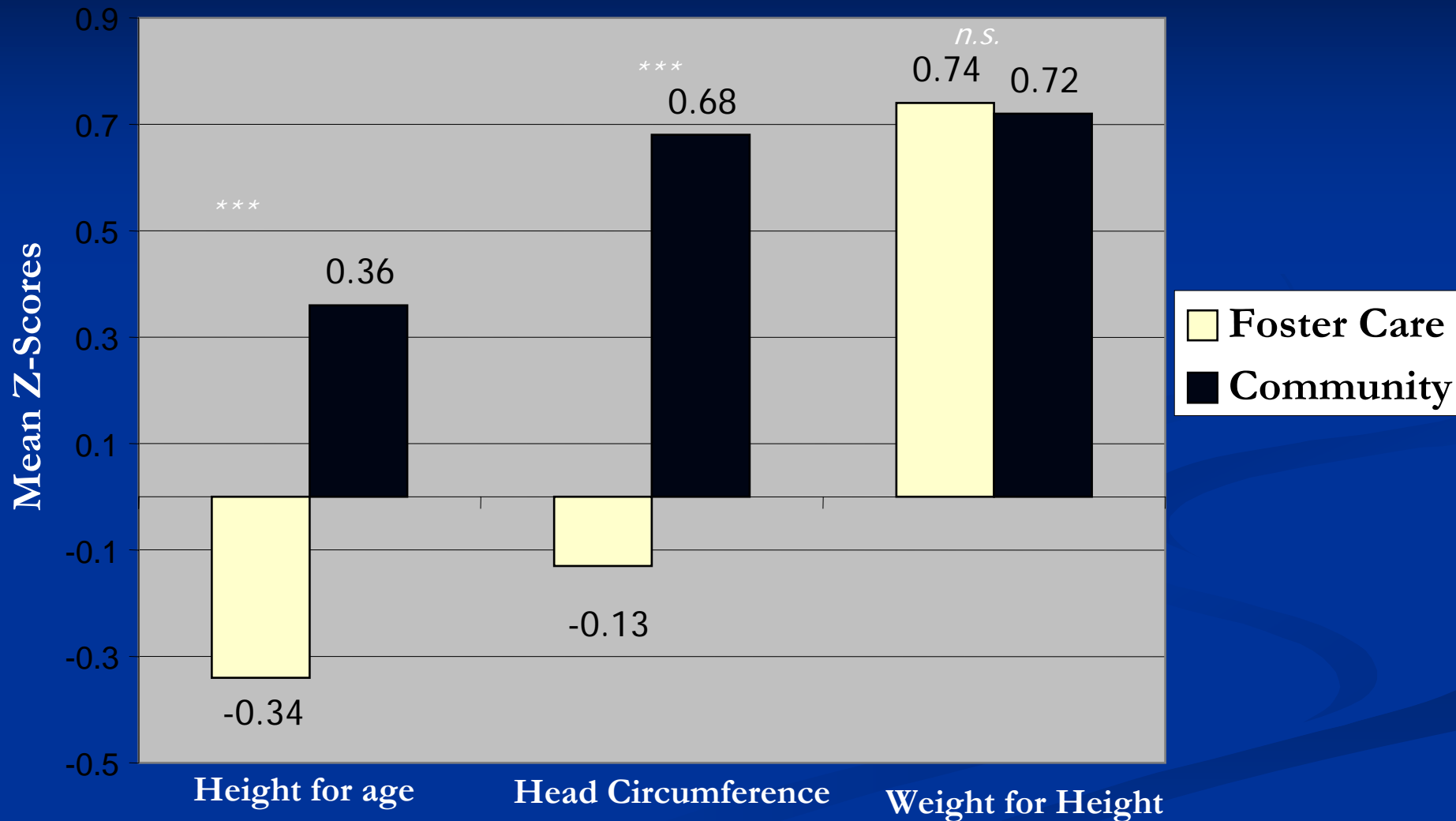
$F(8, 45) = 5.98, p < .0005.$

(Leve & Chamberlain, 2004)

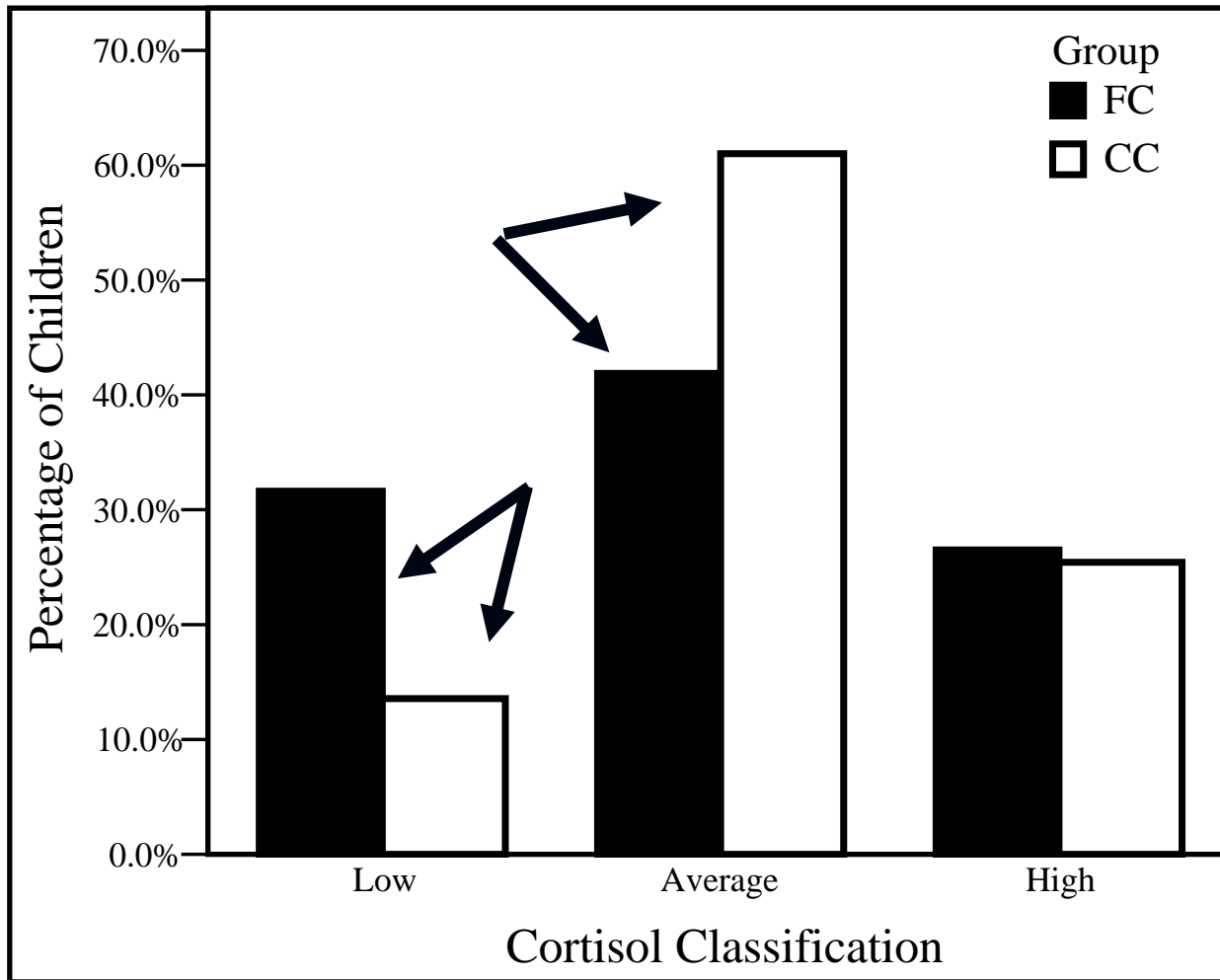
Early Stress Effects on the Brain



Effects of Stress on Physical Development



Effects of Stress on HPA Axis Activity



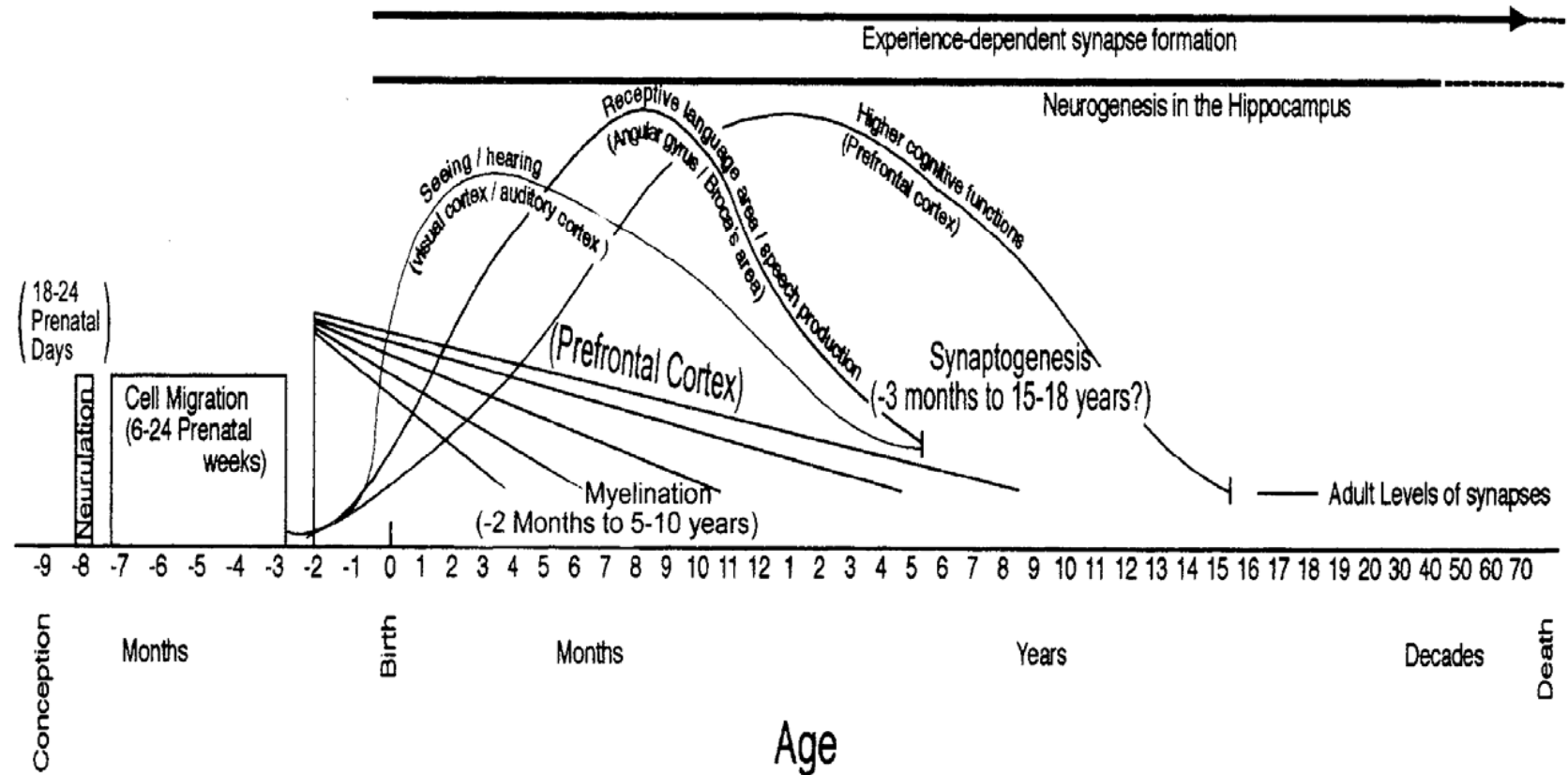
Proportion of foster children with wake cortisol < .30 ug/dl (1 sd below the mean for community children)

$$X^2 = 6.45 \text{ } p < .01$$

Brain Development

Figure 1

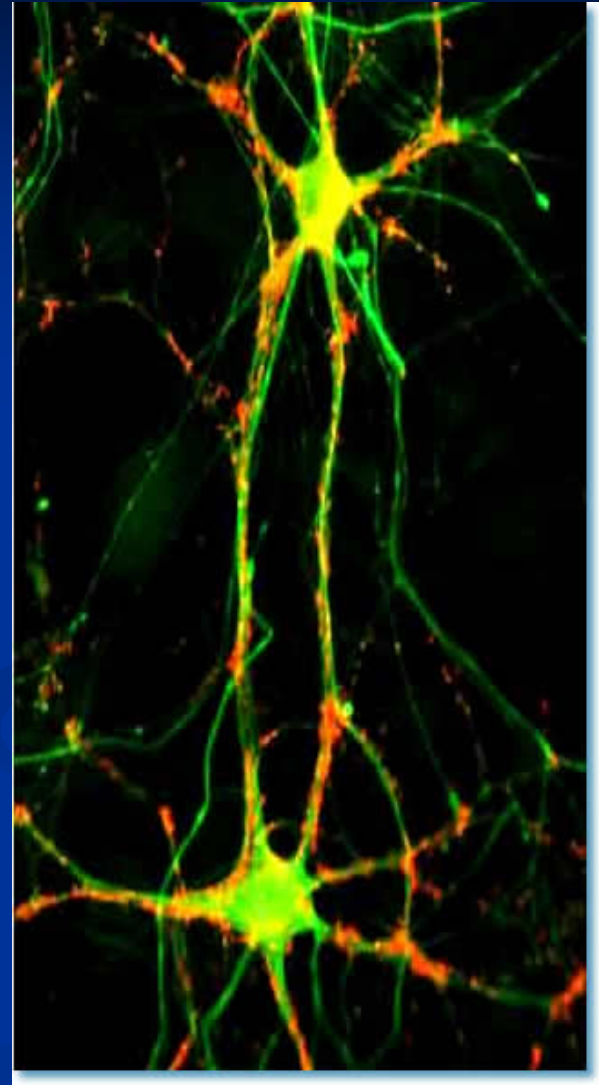
The Developmental Course of Human Brain Development



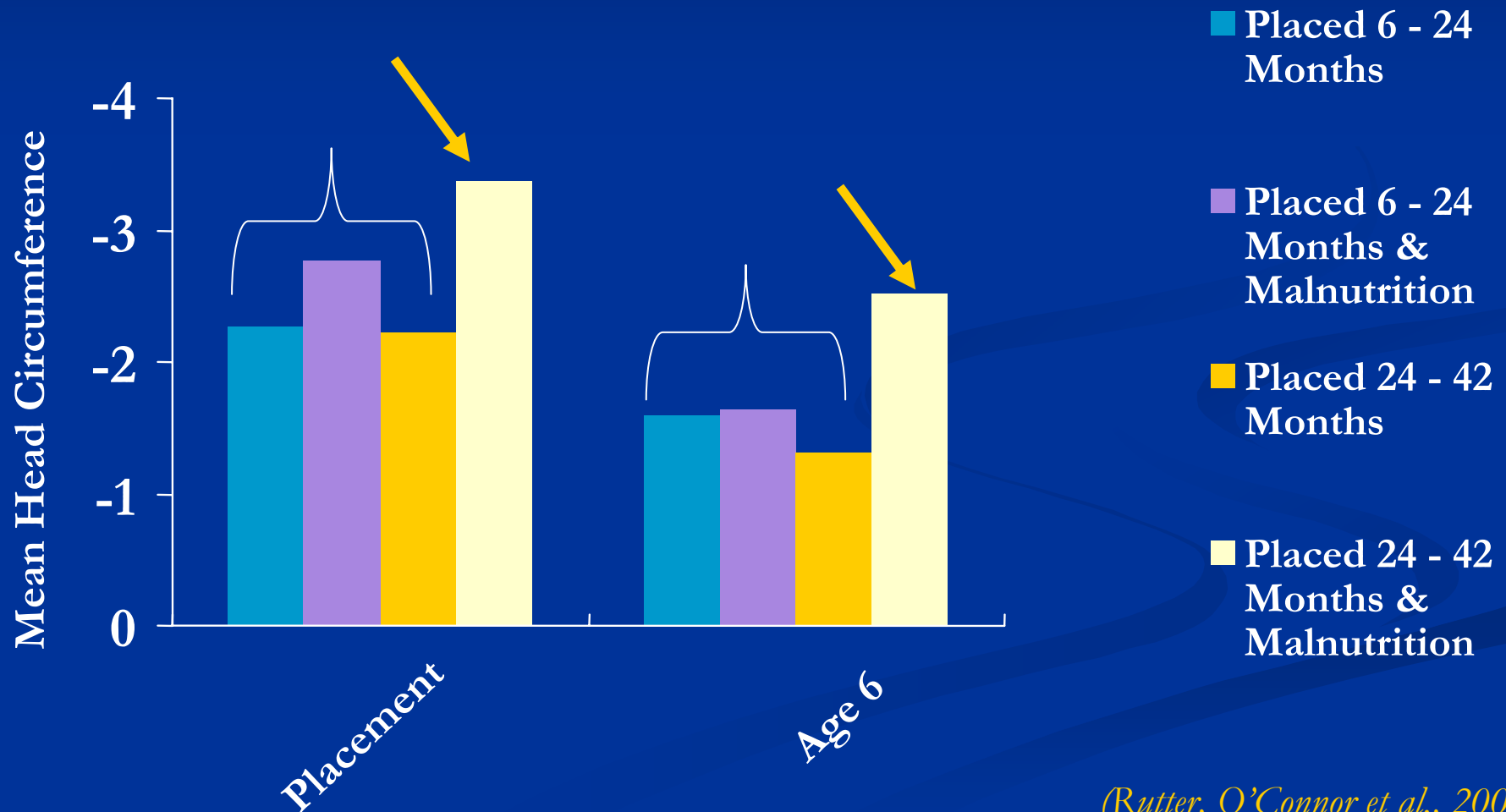
Note. This graph illustrates the importance of prenatal events, such as the formation of the neural tube (neurulation) and cell migration; critical aspects of synapse formation and myelination beyond age three; and the formation of synapses based on experience, as well as neurogenesis in a key region of the hippocampus (the dentate gyrus), throughout much of life.

Brain Plasticity

- Many systems maintain plasticity over the course of development
- May be possible to reverse effects of early stress on the brain through interventions
- BUT plasticity narrows with age, so early intervention warranted

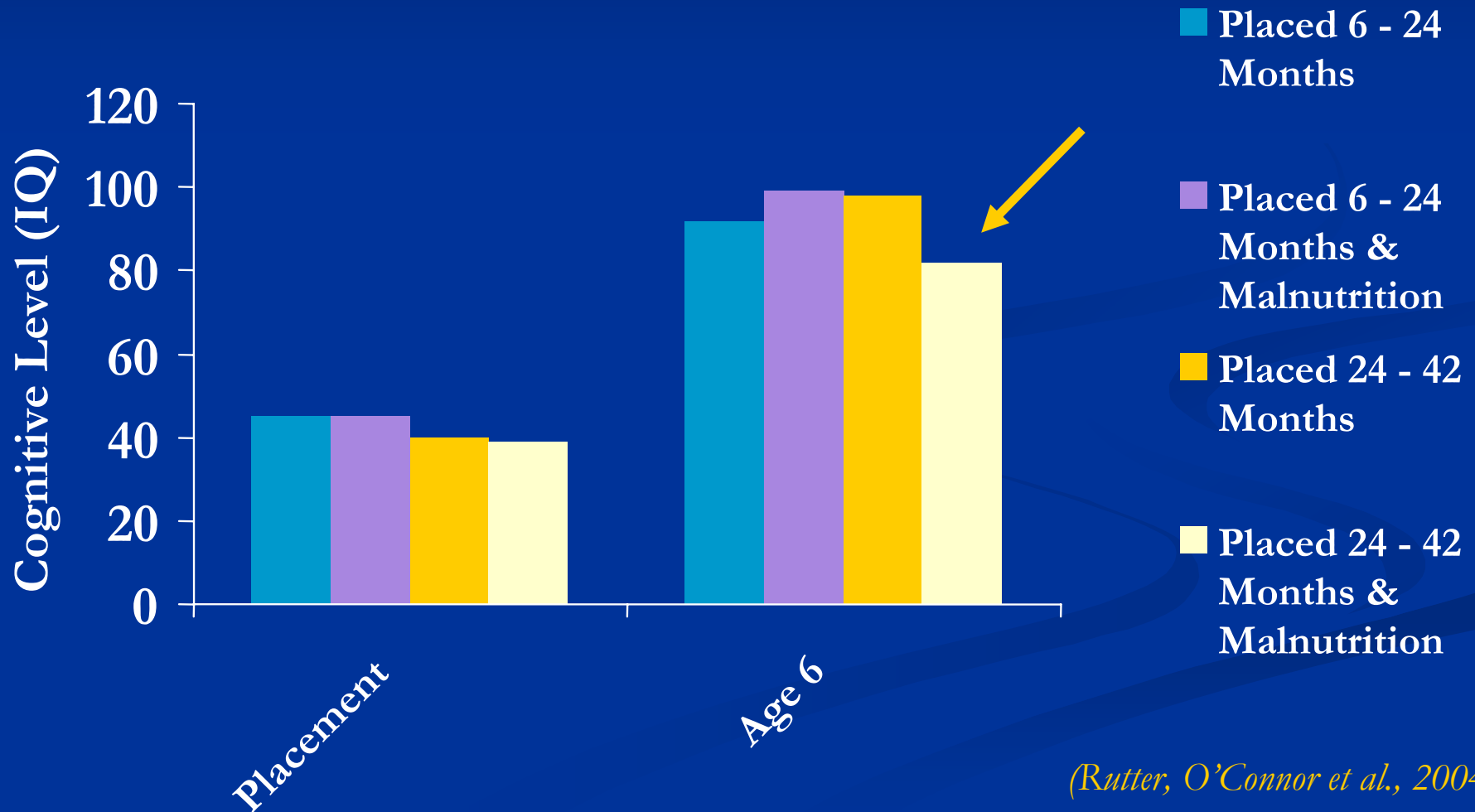


Romanian Adoptees' Head Circumference



(Rutter, O'Connor et al., 2004)

Romanian Adoptees' IQ



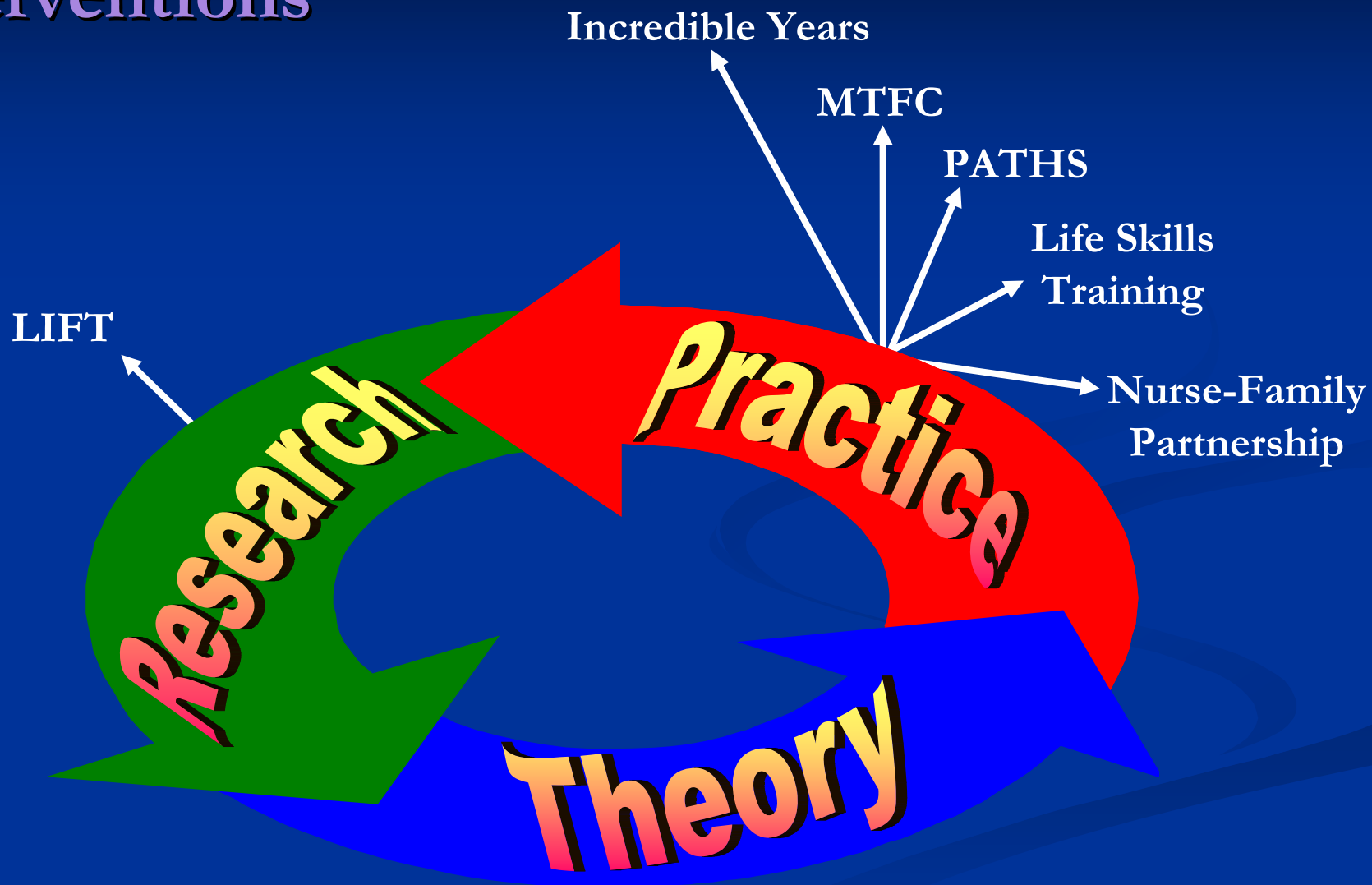
Summary

- The California foster care population is substantial and it's composition is shifting
- Foster children are a vulnerable population at risk for a host of poor behavioral, mental health, and developmental outcomes
- Early stress and adversity affect brain functioning
- There is good cause for hope: Effective preventive intervention efforts can help ameliorate the negative effects of early adversity on behavioral and brain functioning

Effective Strategies Are Needed

- To identify foster children's needs and risk
- To reduce foster children's risks
- To promote their healthy development
- To support and retain foster parents

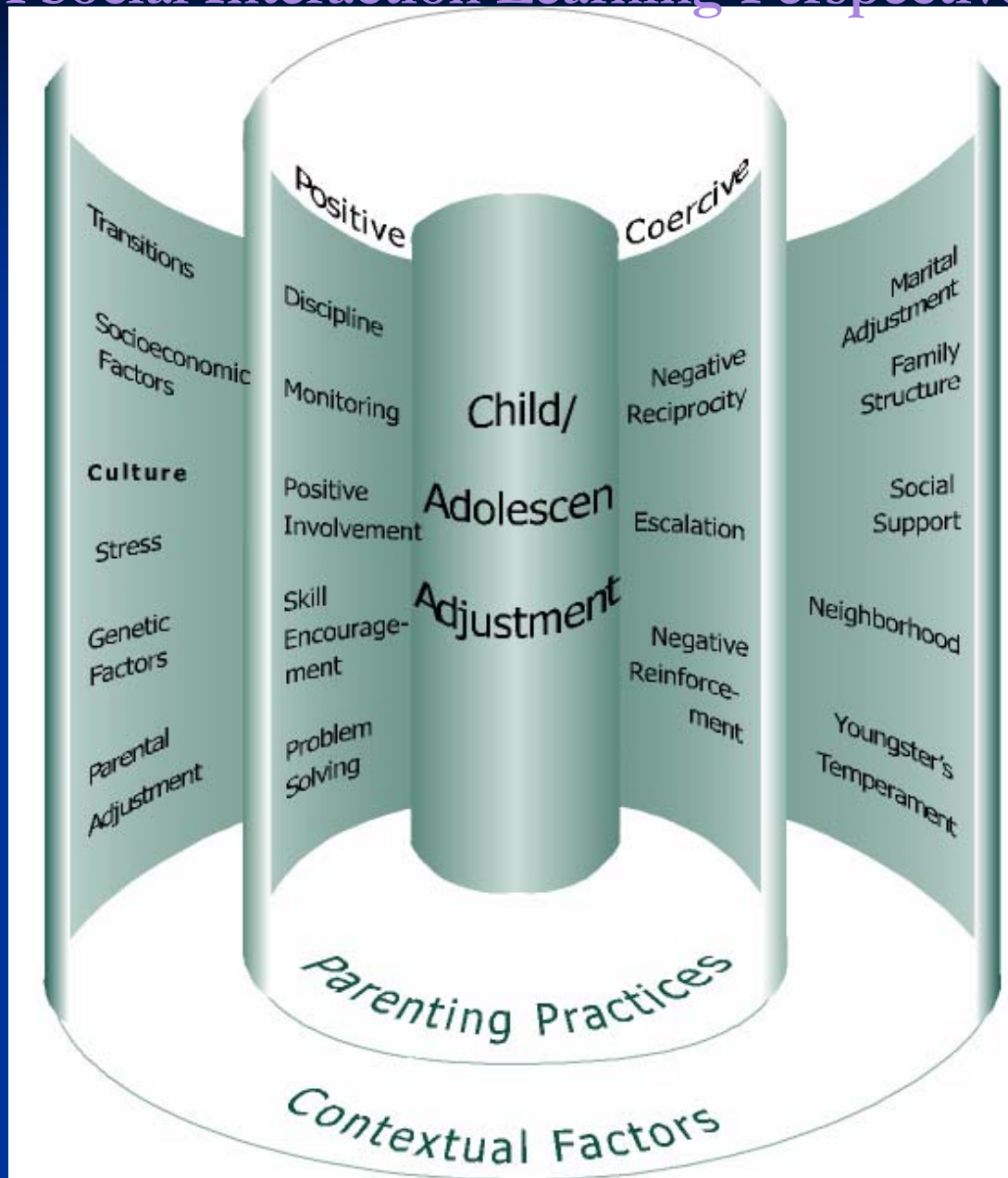
Principles of Effective Preventative Interventions



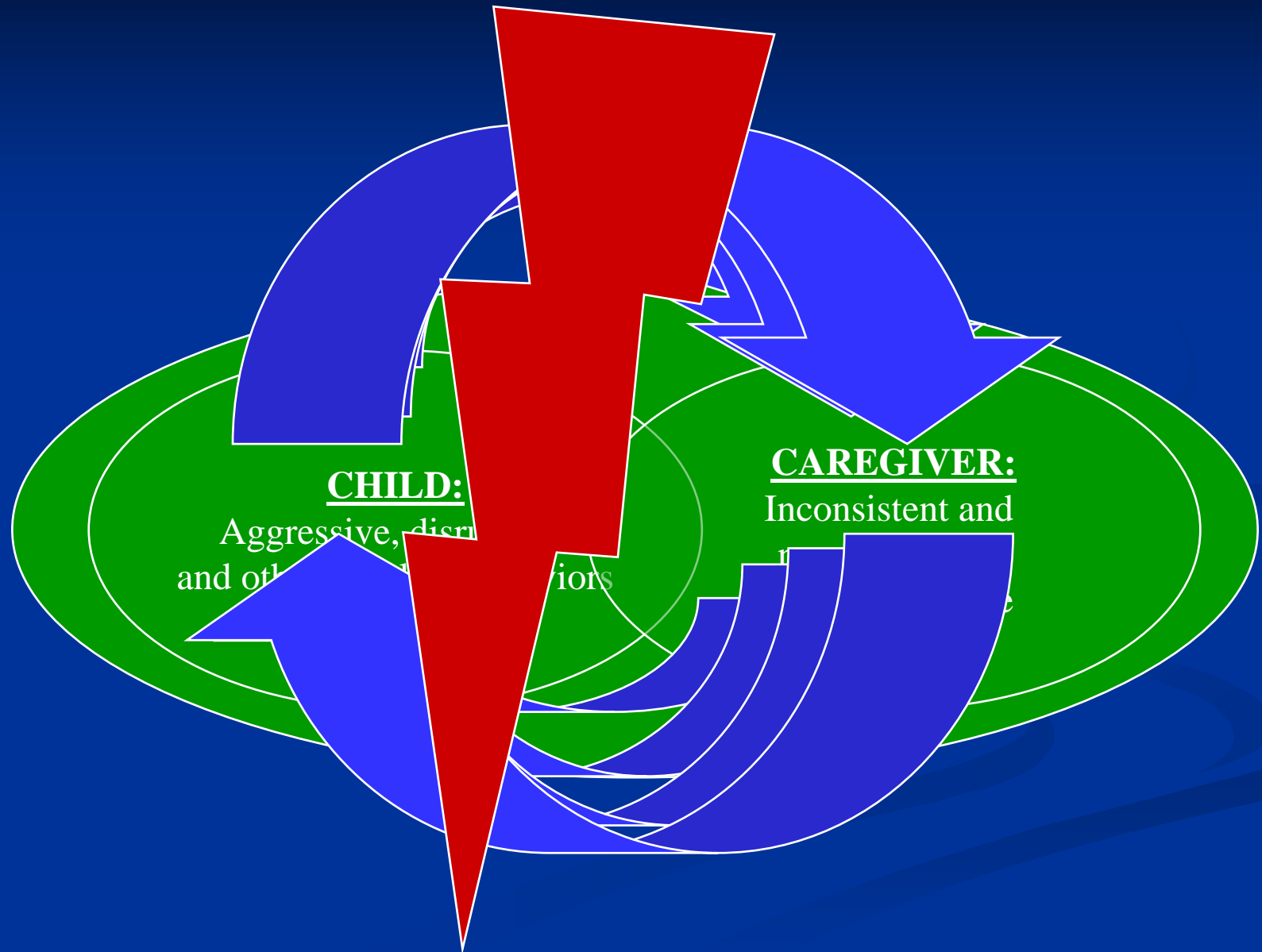
Core Elements of Effective Prevention & Early Intervention Programs

- Family-based programming
- Multiple systems targeted
- Strength-building approach
- Developmentally-appropriate approach

Why Family-Centered Models are Important: A Social Interaction Learning Perspective



Coercive Cycles Within the Family



Family-Based Preventative Interventions:

- Interventions that are implemented within the family system to change parenting practices and family interaction patterns.
- Example: **Linking the Interests of Families and Teachers** program (Reid, Eddy, Fetrow, & Stoolmiller 1999) is a preventive intervention that has been shown to the onset of conduct problems and drug use by implementing effective behavioral management strategies that promote children's social and emotional development. Such family-based strategies include: establishing clear limits, providing positive encouragement and incentives for desired behaviors, developing problem solving strategies for areas of conflict and disagreement, using and maintaining noncoercive and consistent methods with follow through, and anticipating problem situations.

Targeting Multiple Systems:

- Interventions that focus on change in the multiple systems that the child is a part of. For example, effective programs typically involve coordinated services across at least two of the following: child, parents, teachers/school, case worker/service provider.
- Example: **The Incredible Years** program includes three integrated curricula: one for parents to increase their behavioral management skills; one for children to promote skill development; and one for teachers to improve classroom management strategies and produce organizational change. This program has been found to strengthen the parenting skills in families at risk and to increase children's on-task behavior and decrease their conduct problems in the classroom (Reid & Webster-Stratton, 2001).



The Incredible Years: Parents, Teachers, and Children Training Series is a comprehensive set of curricula designed to promote social competence and prevent, reduce, and treat aggression and related conduct problems in young children (ages 4 to 8 years). The interventions that make up this series—parent training, teacher training, and child training programs are guided by developmental theory concerning the role of multiple interacting risk and protective factors (child, family, and school) in the development of conduct problem.

Reducing Risk Factors

The Programs address multiple risk factors which have been shown to be related to later development of delinquency, substance abuse and violence. These include child risk factors (e.g., language and learning delays, attention deficit disorder, conduct problems, lack of social skills), family and parenting risk factors (e.g, harsh and inconsistent discipline, poor monitoring, lack of parental support, poor relationship with teachers and schools) and school risk factors (e.g., teachers classroom management skills, academic difficulties, classroom aggression, playground bullying, peer rejection and deviant peer groups).

<http://www.incredibleyears.com/>

Strength-Building Preventative Interventions

- Interventions that focus on building on the strengths of the parent, child, and family and increasing skills.
- Example: A set of effective interventions utilize skill development curriculum that teach youth about the harmful effects of drugs and provide an alternative set of behaviors and responses that can be effectively employed instead of drug use. Two such school-based programs, **Life Skills Training** (Botvin, Baker, Dusenbury, Botvin, & Diaz, 1995) and the **All Stars** program (Donaldson, Graham, Piccinin, & Hansen, 1995), have been shown to be cost-effective programs that significantly delay the onset of alcohol use. Long-term follow-up of the Life Skills Training further shows its effectiveness in preventing and reducing tobacco, marijuana, and drug use. Both programs have demonstrated cost-effectiveness (Aos et al., 2004).

PATHS (Providing Alternative THinking Strategies)

<http://www.prevention.psu.edu/projects/PATHS.htm>

The PATHS curriculum is a program for educators and counselors that is designed to facilitate the development of self-control, emotional awareness, and interpersonal problem-solving skills. The curriculum consists of an Instructional Manual, six volumes of lessons, pictures and photographs, and additional materials. A research book is also available. PATHS is designed for use with elementary school- aged children. The purposes of the PATHS Curriculum are to enhance the social competence and social understanding of children, as well as to facilitate educational processes in the classroom.

An effective social-cognitive program is important because children often exhibit difficulties in social problem-solving, self-control, affective understanding, and self-esteem. The PATHS Curriculum provides teachers and counselors with a systematic developmental procedure for enhancing social competence and understanding in children.



Developmentally-Appropriate Preventative Interventions:

- Interventions that consider and map onto the critical needs and strengths of the child's developmental period and parenting challenges of that period
- Example: **Nurse-Family Partnership for Low Income Women** (Olds et al., 1998; Olds et al., 2004). In this program, nurses provide home visits to predominantly low-income pregnant women during pregnancy and for the first two years of the child's lives. The core intervention components focus on maternal skill building, including increasing skills in positive health related behaviors, competent care of children, and maternal personal development. Child wellness outcomes for this program have extended through adolescence and young adulthood, and include fewer injuries and hospitalizations, fewer arrests and convictions, less tobacco and alcohol use, and safer sexual behavior. In addition, there were fewer reports of child abuse for children and less maternal drug use in the intervention group.

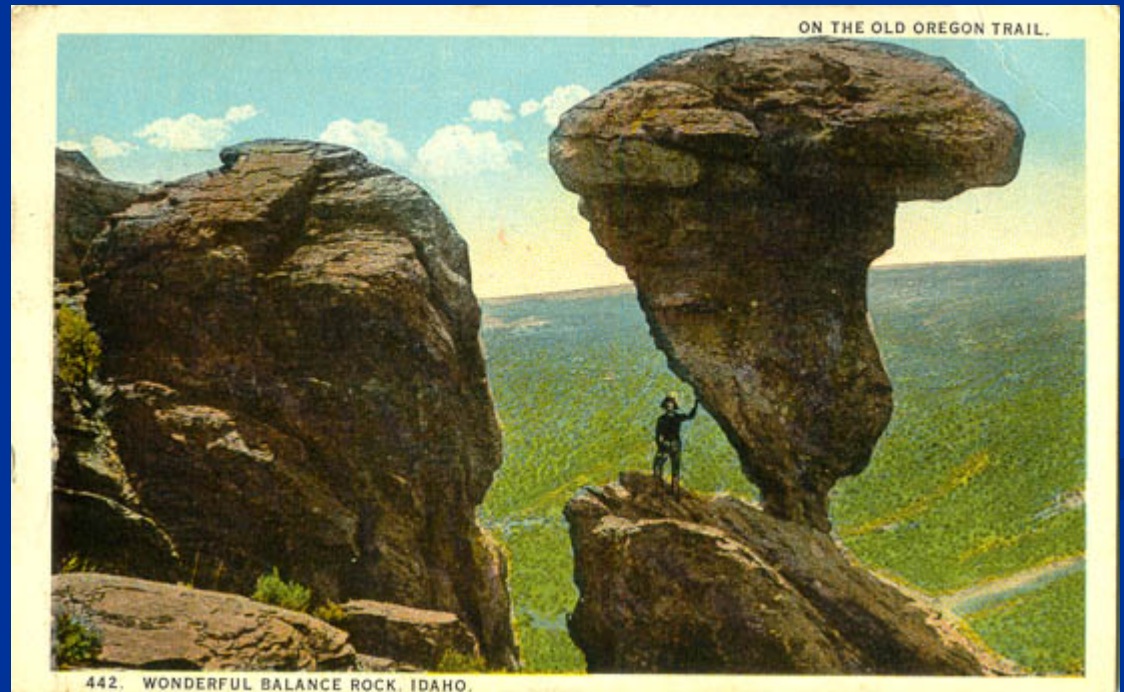


<http://www.nursefamilypartnership.org/index.cfm?fuseaction=home>

Nurse-Family Partnership is an evidence-based nurse home visitation program that improves the health, well-being and self-sufficiency of low-income, first-time parents and their children. The Nurse-Family Partnership National Service Office, located in Denver, Colorado is a nonprofit organization that provides service to communities in implementing and sustaining this program. Nurse-Family Partnership implementing agencies are supported by a team of public health policy and administration, nursing, education and program evaluation professionals at the National Service Office who collaborate with [Public/Private Ventures](#), [Invest in Kids](#), and other partners in the 21 states where Nurse-Family Partnership is currently established.

Tipping Points

Prenatal, preschool
and early
adolescence as
critical periods
for subsequent
outcomes



Summary

- Effective early intervention programs are typically family-based, target the multiple systems in which the child is interacting, build on child and family strengths, and are sensitive to developmental needs and challenges.
- There are many examples of effective prevention programs for at risk youth, although few have been evaluated specifically for use with children in foster care.

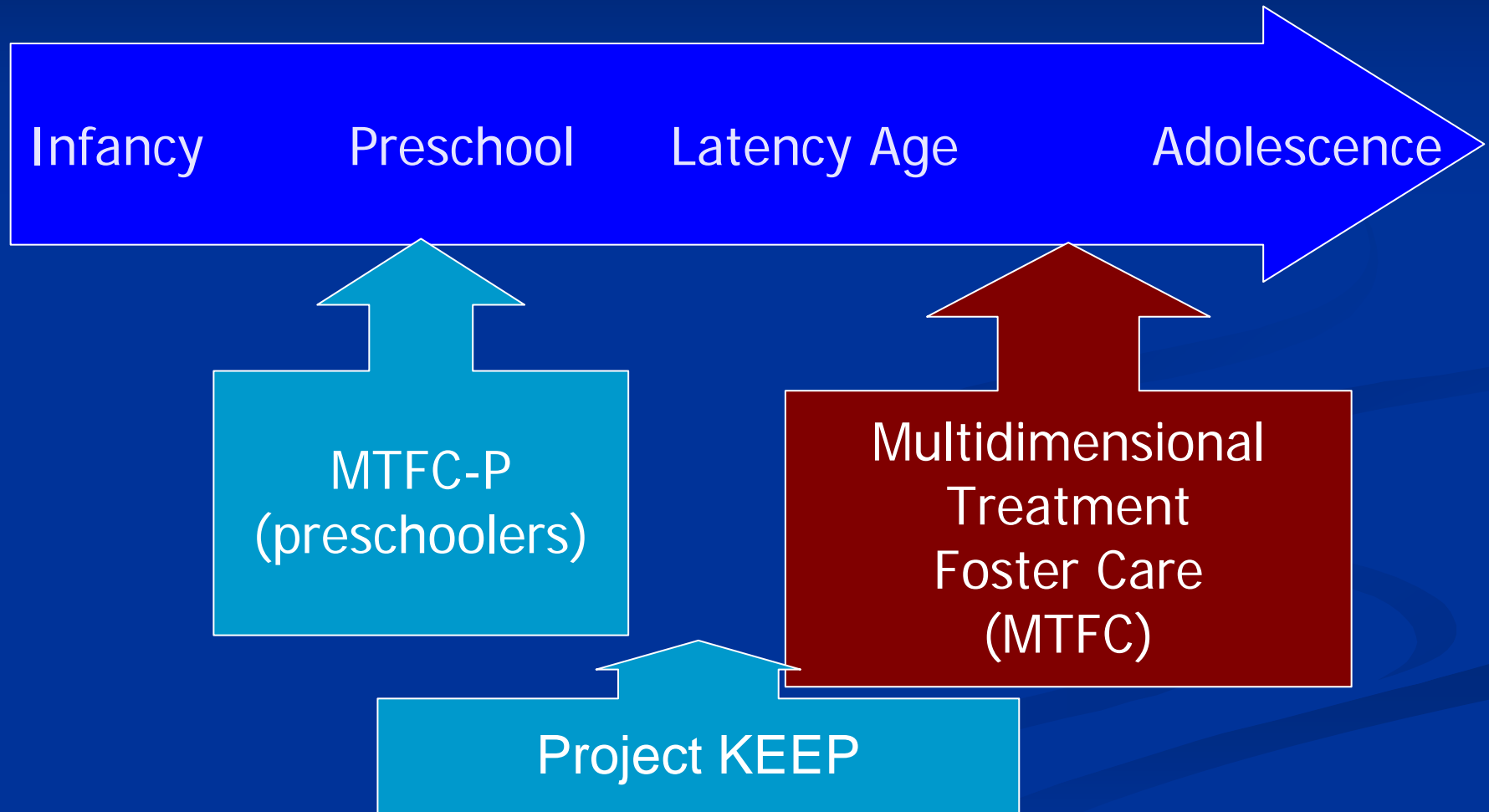
Foster Care as a Preventative Intervention Setting

- Example: Multidimensional Treatment Foster Care (MTFC)
 - Foster Care resulting from Delinquency - 3 RCT's
 - The Mediators of Male Delinquency [MH47458]
 - Female Delinquency: Treatment Processes/Outcomes [MH54257]
 - Preventing Health-Risking Behavior in Delinquent Girls [DA15208]
 - Foster Care resulting from Child Welfare involvement - 6 RCT's
 - Preventing Problems for Girls in Foster Care [MH54257]
 - Pathways Home: Reducing Risk in the CWS [DA17592]
 - The Early Intervention Foster Care Program [MH59790]
 - KITS: School Readiness in Foster Care Efficacy Trial [DA021424]
 - Cascading Dissemination of a Foster Parent Intervention [MH60195]
 - Preventing Behavior and Health Probs for Foster Teens [DA20172]

The Oregon MTFC Model

- **Objective:** To prevent the negative trajectory of antisocial behavior by improving social adjustment with family members and peers through simultaneous and well-coordinated treatments in the home, school, & community.
- Treatment is provided in a family setting where new skills can be practiced and reinforced.

MTFC Family of Evidence-Based Programs



Basic Concept

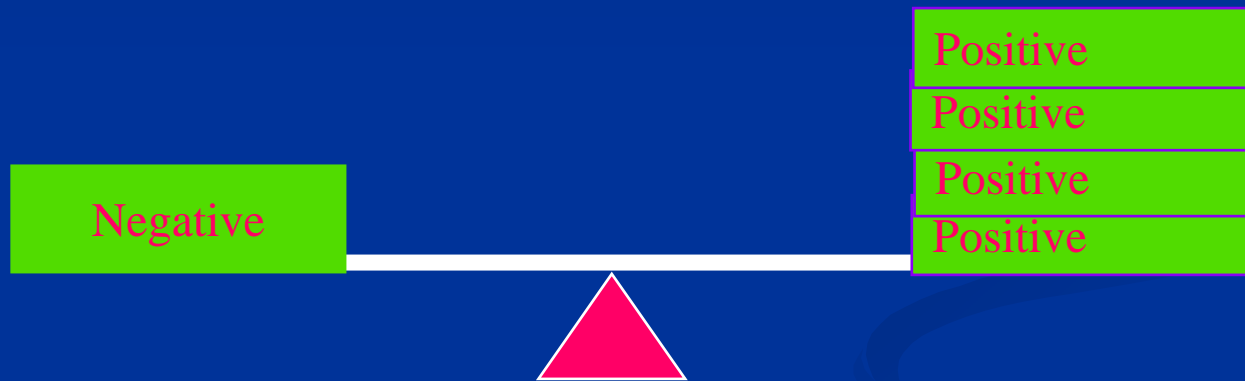


MTFC & MTFC-P Program Goals

- Treatment techniques: *Simple, practical, & effective*
- Research-based areas of emphasis:
 - Support and encourage positive behavior
 - Clear and consistent limits
 - Close supervision of the child
 - Separation from delinquent peers (adolescents)
 - Responsiveness to child's cues and needs (preschoolers)

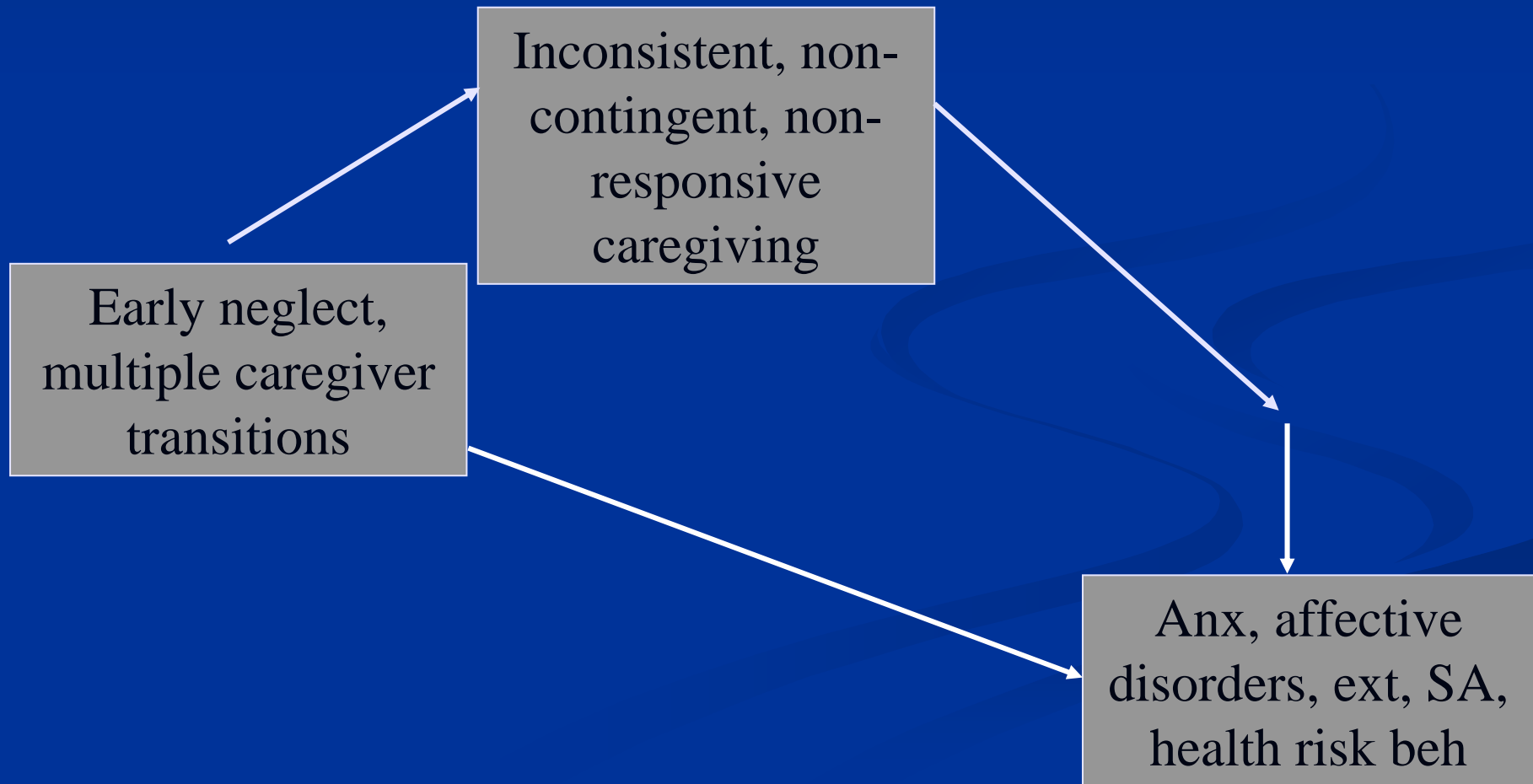
Basic Approach

- Facilitating a balance encouragement and limit setting

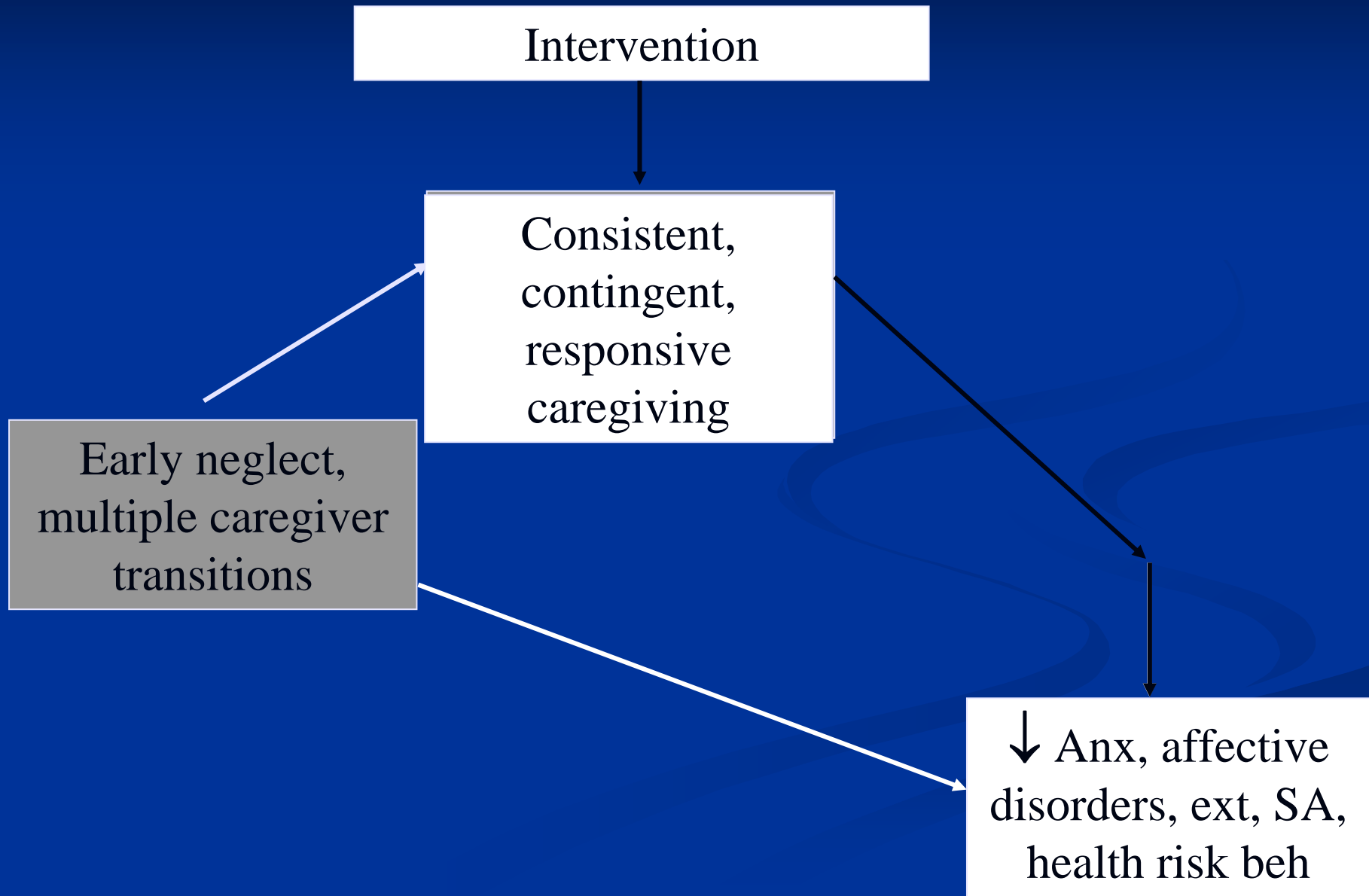


- Treatment team concept
- Consistency across settings in which the child exists

Intervention Conceptual Model



Intervention Conceptual model



Program Structure

Foster Parent Consultant

Family Therapist

'Daily Report' Caller

STAFF

Program Supervisor

*Child Therapist/
Behavioral Skills Trainer*

Child Psychiatrist

Caregiver-Child
Relationship

Case Management

Child Needs

Contexts

Home

Community

Preschool/school

4 Key Program Components

- Foster parent support & consultation services
- Child treatment services
- Parenting support for birth/adoptive families
- Daily Report telephone check-in w/caregiver

Foster Parent Support

- Central concept: Foster parents as members of the treatment team
- 12 hours pre-service training course
- Ongoing consultation with program staff
- Weekly support and training meetings
- 24-hour, 7-day on call staff member
- Emergency crisis intervention
- Respite

Treatment Technique 1: Tangible Encouragement for Positive Behavior

Kid bucks Star/sticker charts Point charts Level system

Preschool

Latency age

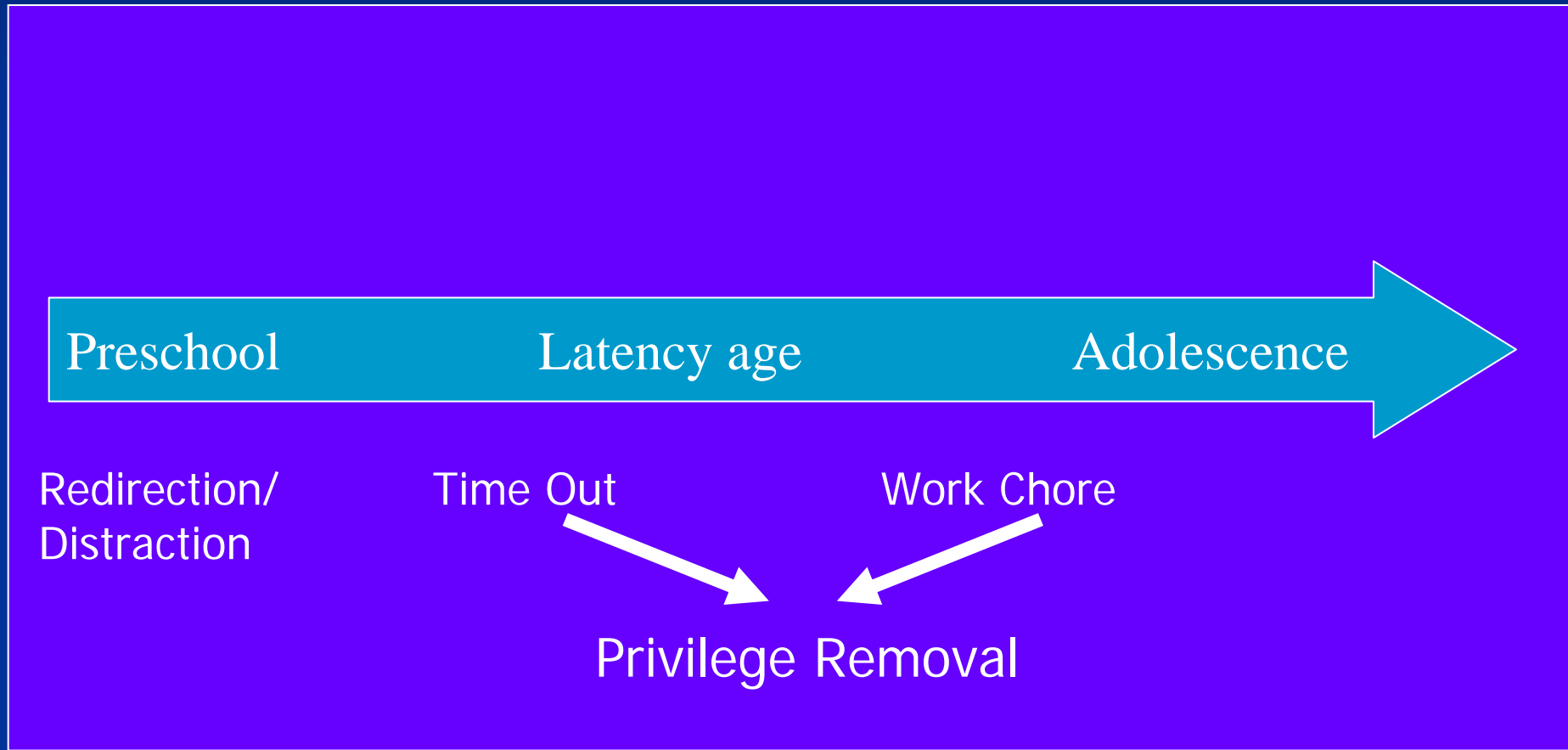
Adolescence

Immediate

Daily

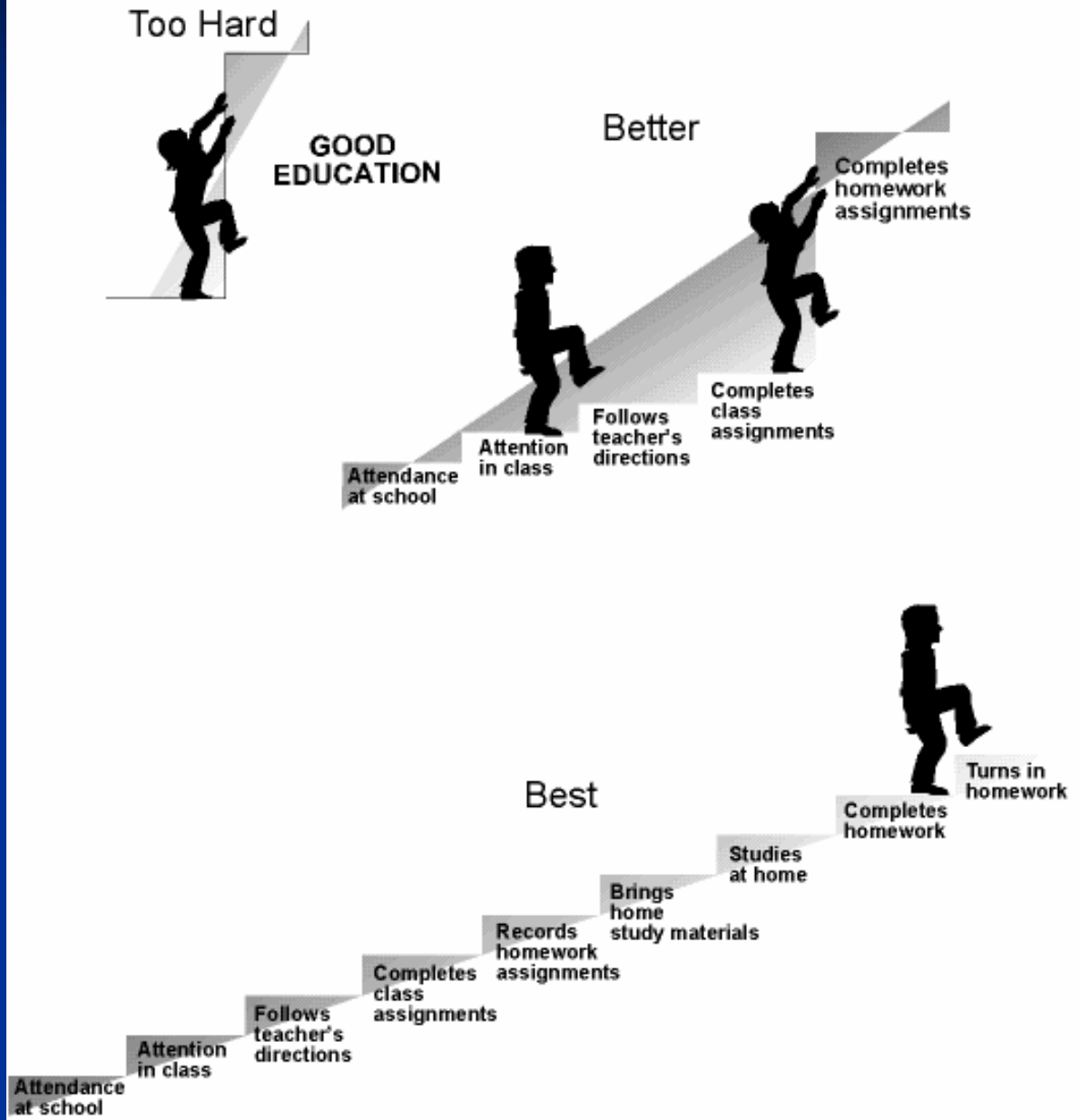
Weekly

Treatment Technique 2: Developmentally Appropriate Limit Setting



Success Grows with Small Steps

Treatment Technique 3:



Resources for Children

- Individual therapy/skills training
- Psychiatric medication management
- School/preschool consultation
- Therapeutic playgroup to promote school readiness (MTFC-P)



- Referral for services to address special needs (e.g. developmental delays, dental, medical)

Parenting Support for Birth/Adoptive Families

- Weekly family counseling focusing on Parent Management Training
- Instruction in behavior management methods
- Home visits with crisis back-up: Start small increase over time...
- Case management: Service coordination, access, utilization
- 24-hour, 7-day on call to case manager
- Aftercare

Daily Report Telephone Check-In

- 5-10 minute telephone call
- Behavior checklist format
 - 0 = behavior did not occur
 - 1 = behavior occurred, was not stressful
 - 2 = behavior occurred, was stressful
- Web-based, housed on OSLC server as WEBdr
 - Data entry, management, and analysis all on-line
 - Facilitates off-site consultation

WebPDR™ Weekly Report

Demo Site - Demonstration

Client ID: demo99 (Age Group: 12 to 18)

Client Name: Jane D

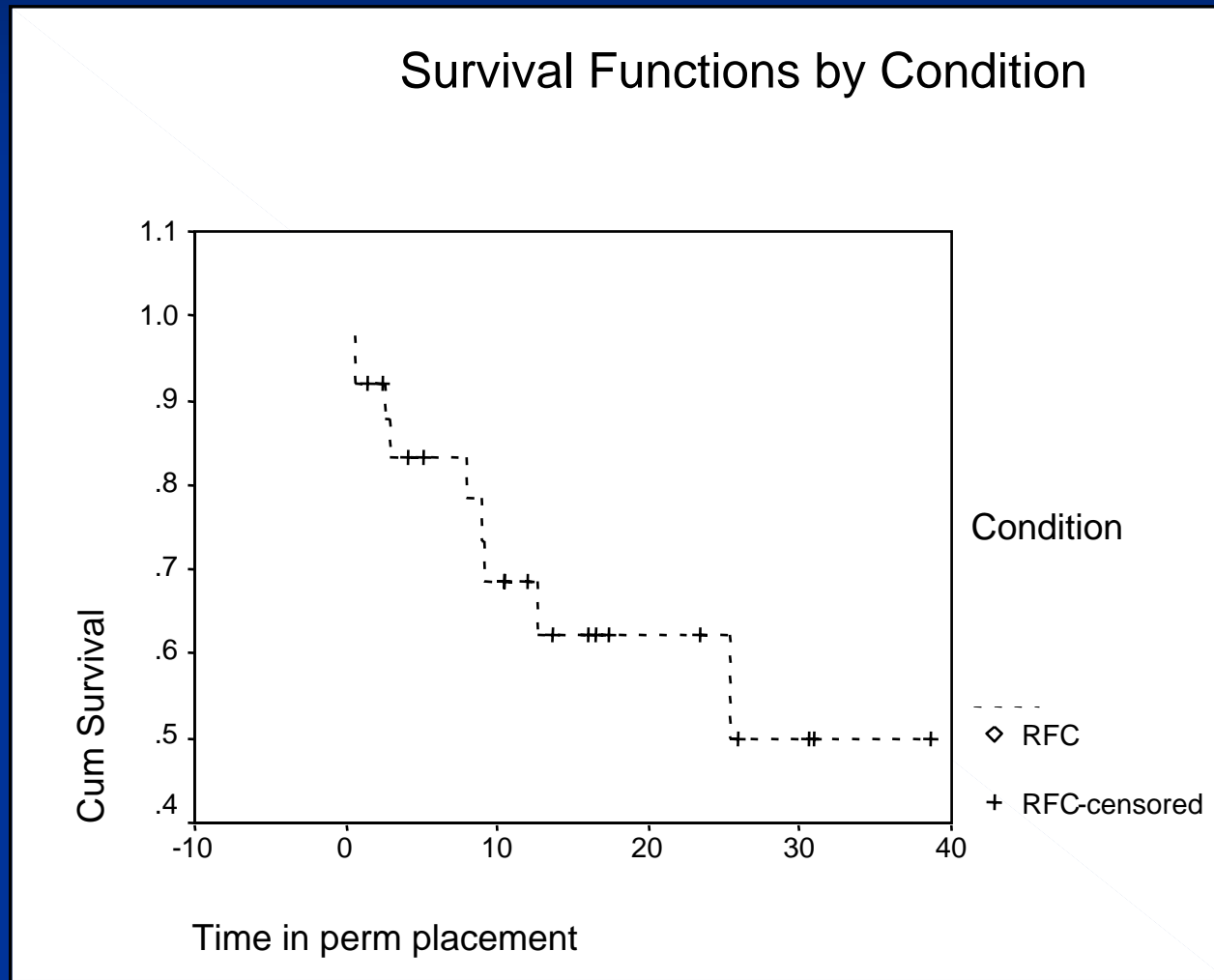
Dates: 6/13/05 through 6/19/05

[Exit Weekly Report](#)

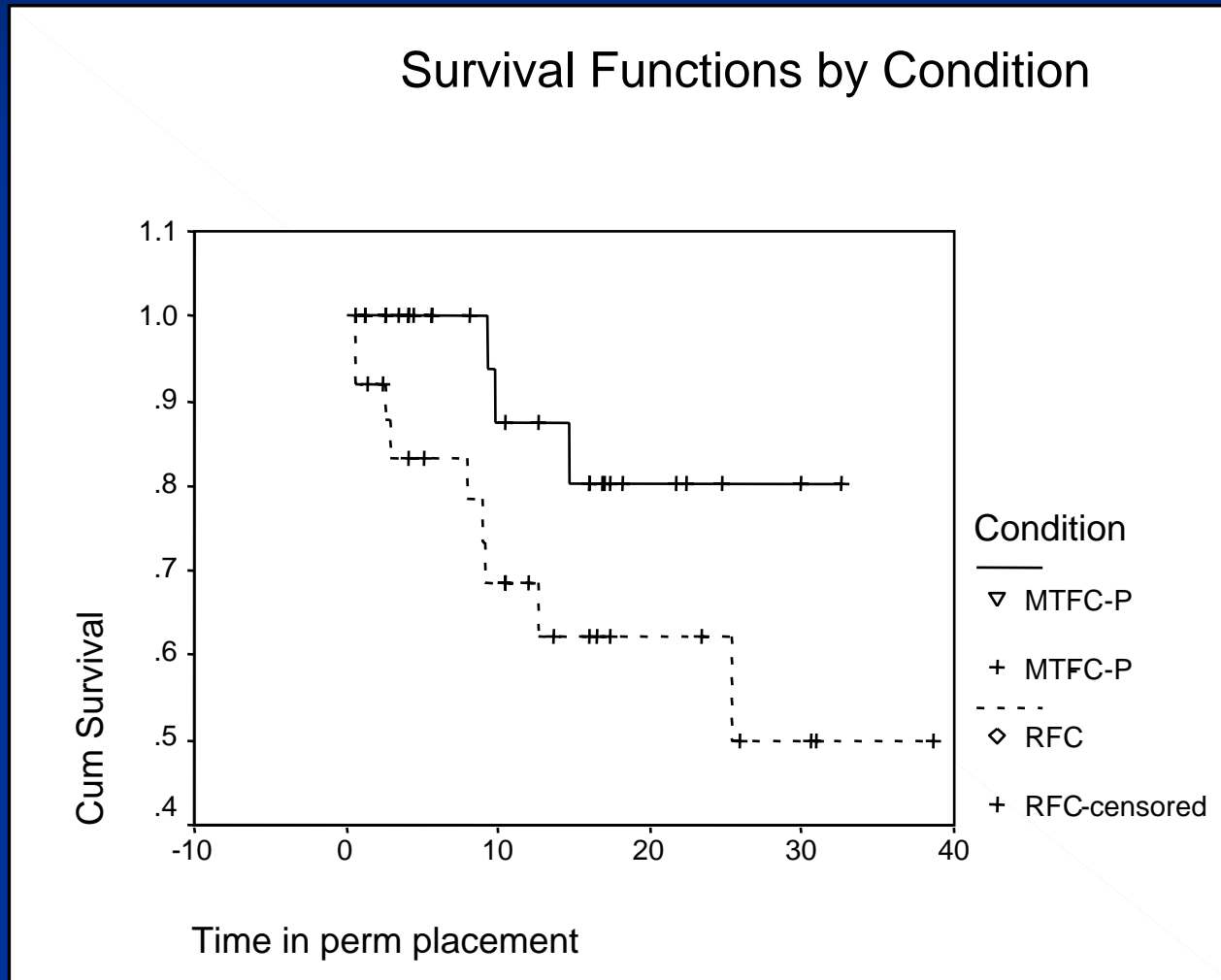
Reference: 1 = Occurred & Not Stressful; 2 = Occurred & Stressful

| Behavior: | Monday | Tuesday | Wednesday | Thursday | Friday | Saturday | Sunday |
|----------------------|---|---|--|---|---|---|--|
| Animal Cruelty | | | | 2 | | 1 | |
| Arguing | 1 | 1 | 1 | 2 | 1 | | 1 |
| Backtalking | 1 | 1 | 1 | 2 | 1 | 2 | 1 |
| Bedwetting | | 1 | | 2 | | | |
| Complaining | | 1 | | 1 | 1 | | 1 |
| Daydreaming | | 2 | | 1 | | | |
| Defiance | 1 | 2 | 2 | 1 | 1 | 1 | 2 |
| Depression/Sadness | | 2 | | | | 2 | |
| Destructiveness | | 2 | | 2 | | 2 | |
| Encopresis | | 2 | | 2 | | 2 | 2 |
| Fearfulness | | 2 | | 2 | | | 1 |
| Fighting | | 1 | | 2 | 1 | | |
| Jealousy | | 1 | | 1 | | 1 | |
| Lying | 1 | 1 | 2 | | 2 | 2 | 1 |
| Nervous/Jittery | | | | | | | 1 |
| Not minding | 1 | | 1 | | 1 | 1 | 1 |
| Pant wetting | | | | 1 | | 2 | |
| Pouting | | | | 1 | | | 1 |
| School problems | 1 | 1 | 1 | 1 | | 1 | 2 |
| Sexual behavior | | 1 | | 2 | | | |
| Short attention span | | 1 | 1 | 2 | 1 | 2 | 1 |
| Sleep problems | | 1 | | 2 | | 2 | |
| Sluggishness | | 2 | | 2 | | | 2 |
| Stealing | | 1 | | 1 | | 2 | |
| Swearing | | 2 | | 2 | | 2 | 1 |
| Teasing | 2 | 1 | 2 | 2 | | | 2 |
| Worried | | 2 | | | | | 2 |
| Competitiveness | | 2 | | | 1 | | |
| Truancy | | 2 | | 1 | | | |
| Irresponsibility | | 2 | 1 | 2 | | | 1 |
| Drug/Alcohol use | 2 | 1 | 1 | | 2 | | |
| Runaway | | 1 | | 2 | | | 2 |
| Mean talk | | 1 | | 2 | 1 | 1 | 1 |
| Skipping meals | | 1 | | 2 | | 2 | |
| Staying out | | 2 | | 1 | | 2 | 2 |
| Daily Grade | B | n/a | B | n/a | B | B | n/a |
| Time Outs | n/a | n/a | n/a | n/a | n/a | 1 | n/a |
| Points Earned | 145 | | 120 | | 140 | 125 | 140 |
| Points Lost | 10 | | 30 | | 20 | 10 | 20 |
| Total Behaviors | 9 | 32 | 11 | 30 | 12 | 20 | 21 |
| Total Intensity | 11 | 45 | 14 | 48 | 14 | 32 | 30 |
| Interviewer | demouser | demoadmin | demouser | demoadmin | demouser | demouser | demouser |
| Respondent | Sally M | sue | Tom | sue | Sily | sam | Michael |
| | Med given: Yes Med notes: Overall doing well Note 1: Trying to get drug use under control Note 2: Note 3: General: | Med given: Med notes: Note 1: Note 2: Note 3: General: | Med given: Yes Med notes: Topomax Note 1: Likes to teas not enjoyabel to others, dose not know when to stop. Note 2: Note 3: General: | Med given: Med notes: Note 1: Note 2: Note 3: General: | Med given: Yes Med notes: Takes meds well Note 1: 3. Likes to back talk 16. Lying about were he was Note 2: Note 3: General: | Med given: Yes Med notes: Taken on time Note 1: Note 2: Note 3: General: Child is wetting pant and arguing but improving | Med given: Med notes: Adderall-ADHD BX Note 1: 23. Talking during silent reading Note 2: Note 3: General: |

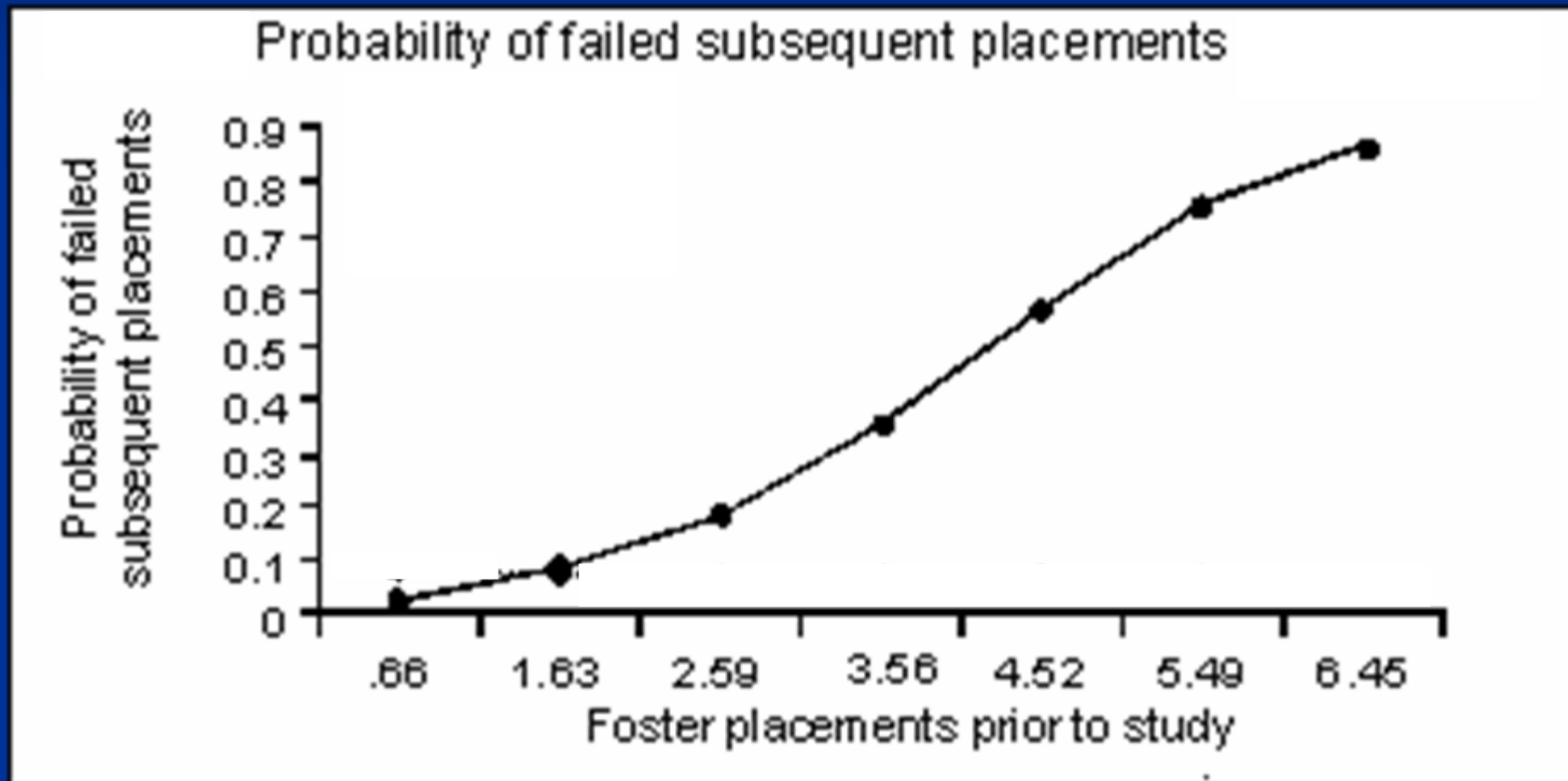
MTFC-P Permanent Placement Outcomes Following Foster Care



MTFC-P Permanent Placement Outcomes Following Foster Care

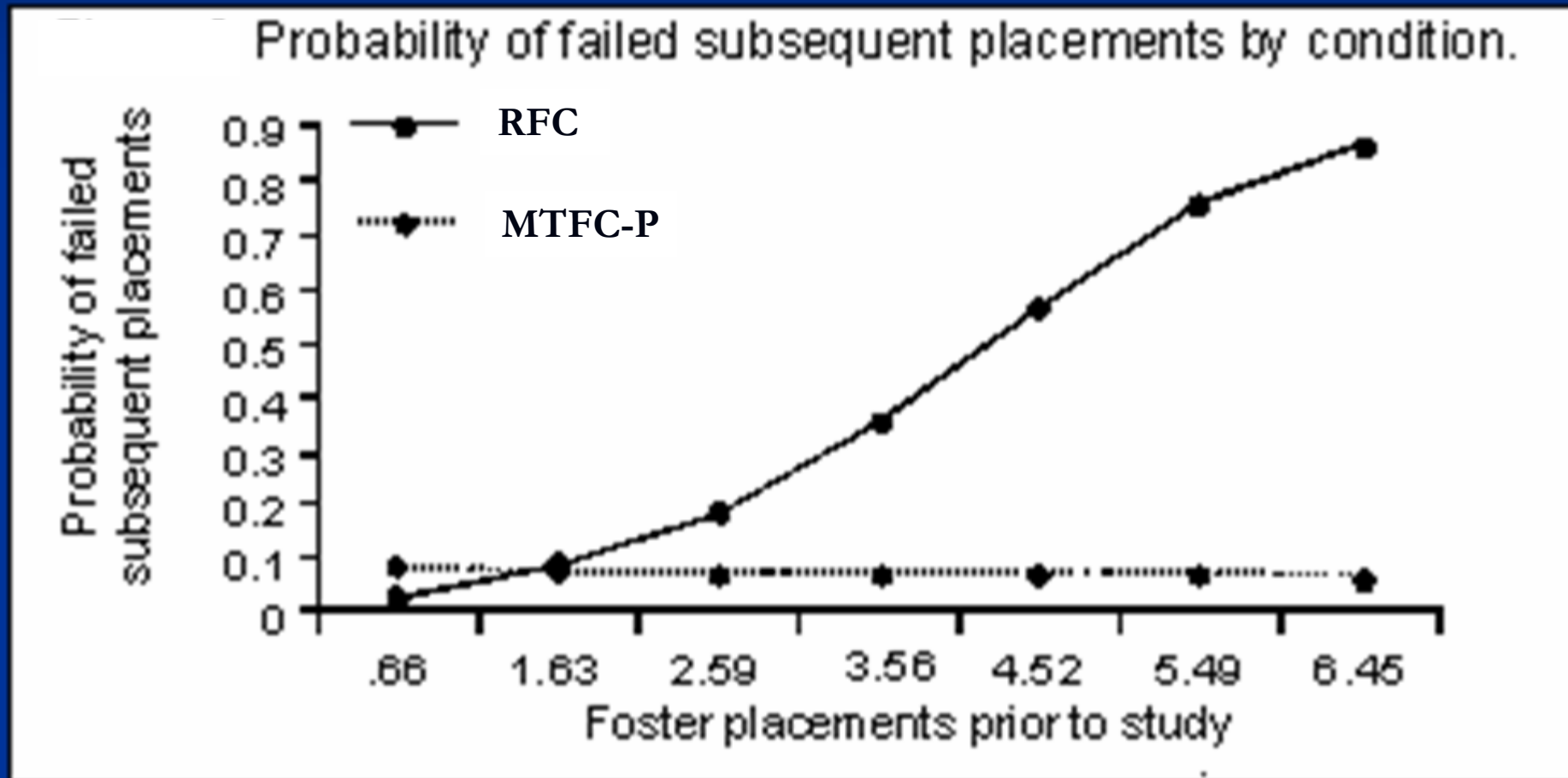


MTFC-P Prior Out-of-Home Placements Effects on Permanent Placement Failures



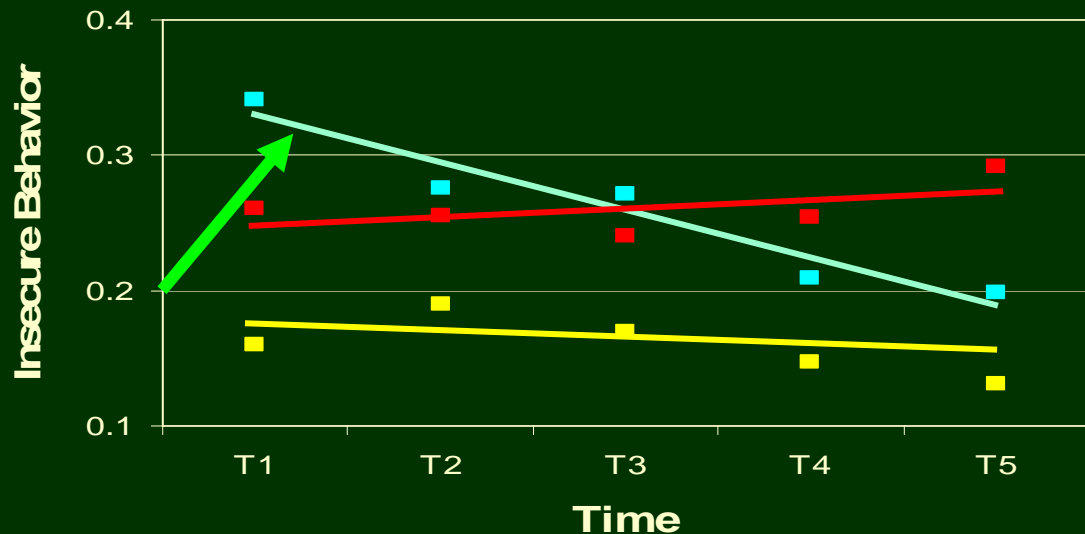
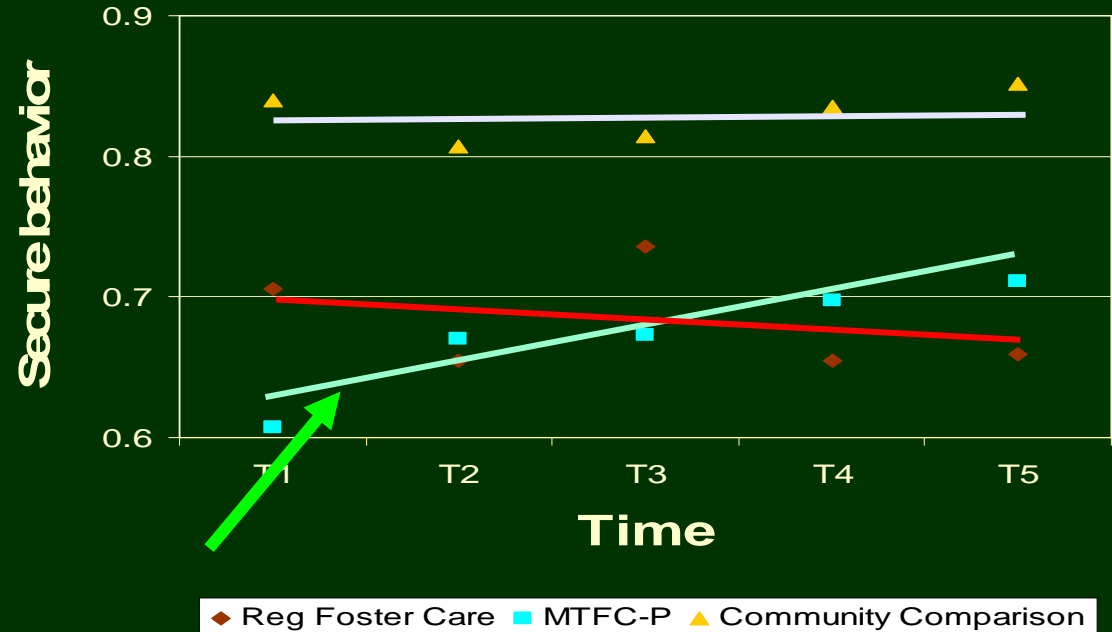
(Fisher, Burraston, & Pears, 2005)

MTFC-P Prior Out-of-Home Placements Effects on Permanent Placement Failures



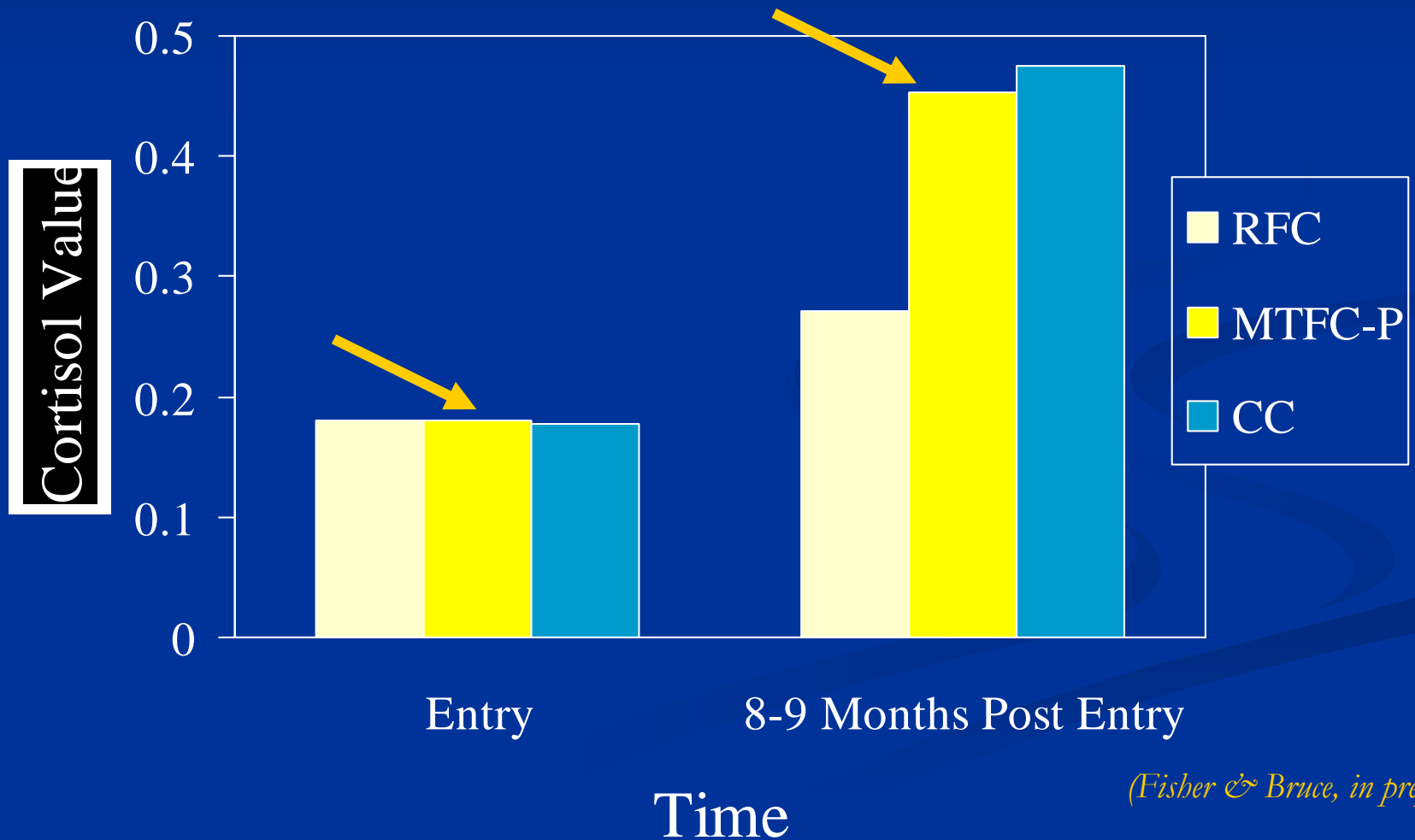
MTFC-P Attachment Outcomes

Secure and insecure attachment at 3 month intervals



(Fisher & Kim, submitted)

MTFC-P Neuroregulatory Outcomes



MTFC Outcomes for Youth in Juvenile Justice

Random assignment



Each participant had at least one criminal offense.

Group Care

MTFC

Deviant peer association

• **GC ↑ MTFC** ¹

MTFC ↓



- **Self-reported delinquency**
- **Arrests**
- **Violent offenses** ²



- **Days in detention**
- **Parent-reported delinquency**
- **Arrests**
- **Deviant peer association** ³

Baseline

Intervention

1- & 2-year follow-ups

¹ Eddy & Chamberlain, 2000; Leve & Chamberlain, 2005

² Chamberlain & Reid, 1998; Eddy, Whaley, & Chamberlain, 2004

³ Leve, Chamberlain, & Reid, 2005; Chamberlain, Leve, & DeGarmo, 2006

Summary

- Multidimensional Treatment Foster Care (MTFC) is one effective approach for preventing mental health and behavioral problems, increasing placement stability, and enhancing neural functioning for youth in foster care
- Factors relating to effective implementation of MTFC through community-based organizations are currently being examined in several sites in California

Additional Considerations Affecting the Implementation of Prevention Programs for Foster Youth in California

- Changing ethnic composition, implications of cultural and familial values, and generational status
- Gender-relevant needs and services (girls in foster care may be at greater risk for poor outcomes later in adolescence)
- Permanency plan (kinship, adoption, reunification)
- Implementation challenges and barriers

What Predicts Successful Implementation Outcomes?

- Eager buy-in to the model at the system, agency, and clinician levels
- Capacity to fund the model
- Ongoing staff training, supervision, & support
- Ability to recruit and support foster parents
- The bottom line is fidelity to MTFC-P mechanisms:
 - PDR
 - Quarterly program reviews
 - Monitoring outcomes in 7 domains including coding tapes from foster parent and clinical meetings

Thank you

Contact information:

- Leslie Leve, Ph.D.

lesliel@oslc.org

Oregon Social Learning Center

10 Shelton McMurphey Blvd.

Eugene, OR 97401